

# Fundamentals of Physical and Health Education

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**FUNDAMENTALS**  
**OF**  
**PHYSICAL AND HEALTH EDUCATION**

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## **CHAPTER ONE**

### **INTRODUCTION**

There Is need to give Physical and Health education serious attention In our schools, colleges, universities and other higher institution of learning. This is essential when one think about the importance and effectiveness of the subject in relation to the lives of the students, school system communities and the larger society. The subject is a vital area of schooling that prepares students for the complex and challenging lives that await them beyond school, and also as a discipline that provides students with skills to face the many issues for young and adult.

Physical and health education serves as an important tool in tackling some societal problems found among the youths and are often demonstrated in juvenile delinquency and other acceptable acts. Active participation by all students in physical and health education programmes becomes necessary as this will provide skills for life long sports and also equip them with acceptable health behaviour and practices.

Physical and health education is not new in the schools' curriculum as an academic subject or a discipline in educational system; it has come a long way to its present status. From time immemorial, it has been accepted as an integral part of education that helps to develop a whole man. Government for long have recognised its place in the total education of Individuals, and this has been so reflected in the policy statements on education.

The strength of a nation rests significantly upon health and fitness of her peoples and these to a large extent depend on attempts made to promote, improve and preserve the he and fitness of the school children and youths. Properly organised physical and health education programmes well articulated curriculum at all levels of education, definitely provide the essential knowledge, attitude a practices to ensure fitness and healthful living.

This text, however, is delimited to basic topic contemporary physical and health education in schools.

## 1.1 Definition and Concept of Physical Education

Physical education is an important part of the education process. It is not a “frill” or an “ornament” tacked on to the school programme as a means of keeping children busy. It is, instead, a vital part of education.

Through a well-directed physical education program, children develop skills for the worthy use of leisure time, engage in activities conducive to healthful living, develop socially, and contribute to their physical and mental health.

The word *physical* refers to the body. It is often used in relation to various bodily characteristics such as physical strength, physical development, physical powers, physical health, and physical appearance. It refers to the body as contrasted to the mind. Therefore when the word *education* is added to the word physical, thus forming the phrase.

*Physical education.* It refers to the process of education that concerns activities which develop and maintain the human body. When an individual is playing a game, swimming, working out on the parallel bars or performing in any one of the physical education activities, education is taking place at the same time. This education may be a satisfying experience, or it may be an unhappy one. It may help in the building of a strong and cohesive society, or it may have

antisocial results for the participant. Whether physical education helps or inhibits the attainment of educational objectives will depend to a great extent on the leadership responsible for its direction.

## 1.2 OBJECTIVES OF PHYSICAL EDUCATION

### 1.2.1 Organic Development

This refers to proper functioning of the body systems so that the individual may adequately meet the demands placed upon him by his environment. Some of the components developed include:

- ❖ **Muscle Strength:-** The maximum amount of force exerted by a muscle or muscle group.
- ❖ **Muscle Endurance:-** The ability of a muscle or muscle group to sustain effort for a prolonged period of time

- ❖ **Cardiovascular Endurance:-** The capacity of an individual to persist in strenuous activity for periods of some duration. This is dependent upon the combined efficiency of the blood vessels, heart, and lungs.
- ❖ **Flexibility:-** the range of motion in joints needed to produce efficient movement and minimize injury.

### 1.2.2 Neuromuscular Development

A harmonious functioning of the nervous and muscular systems to produce desired movement. This include:

- ❖ **Locomotor Skills:-** Walking, Skipping Sliding, Leaping, Pushing, Running, Galloping, Hopping, lung Pulling.
- ❖ **Nonlocomotor Skills:-** Swaying, Twisting, Shaking, Stretching, Bending, Handing Stopping.
- ❖ **Game Type Fundamental Skills:** Striking, Catching, kicking, Stopping, Throwing, Batting, Starting, Changing direction.
- ❖ **Motor Factors:** - Accuracy, Rhythm, Kinesthetic awareness, Power, Balance, Reaction time, Agility.
- ❖ **Sport Skills:-** Soccer, Softball, Volleyball, Wrestling, Track and Field, Football, Baseball, Basketball, Archery, Speedball, Hockey, Fencing, Golf, Bowling, Tennis.
- ❖ **Recreational Skills:-** Shuffleboard Wearing, Tennis, Hiking, Table tennis, Swimming, Knitting, Boating, Croquet Deck etc.

### 1.2.3 Interpretive Development

- ❖ The ability explore, discover, understand, acquire knowledge, and to make value judgments.
- ❖ A knowledge of game rules, safety measures, and etiquette.
- ❖ The use of strategies and techniques involved in organized activities.
- ❖ A knowledge of how the body functions and its relationship to physical activity.

- ❖ A development of appreciation for personal performance. The use of judgement related to distance, time, space force, speeds and direction in the use of activity implement balls, and self.
- ❖ An understanding of growth and developmental factors affected by movement.
- ❖ The ability to solve developmental problems through movement.

#### **1.2.4 Social Development**

- ❖ An adjustment to both self and others by an integration of the individual to society and his environment.
- ❖ The ability to make judgments in a group situation.
- ❖ Learning to communicate with others.
- ❖ The ability to exchange and evaluate ideas within a group.
- ❖ The development of the social phases of personality attitudes, and values in order to become a functioning member of society.
- ❖ The development of a sense of belonging and acceptance by society.
- ❖ The development of positive personality traits.
- ❖ A development of attitude that reflects good moral character.

#### **1.2.5 Emotional Development**

- i. A healthy response to physical activity through a fulfilment of basic needs.
- ii. The development of positive reactions in spectatorship and participation through either success or failure.
- iii. The release of tension through suitable physical activities.
- iv. An outlet for self-expression and creativity.
- v. An appreciation of the aesthetic experiences derived from correlated activities.
- vi. The ability to have fun.

In addition it is expected that a physically educated person should

- vii. Understand the history of physical education. No person can become physically educated unless he or she understands and has historical perspective concerning the events that have affected the historical growth of the beliefs about physical education and what is possible in the years to come.
- viii. Be proficient in leisure time skill and utilizes this skills are for relaxation and recreation. Some skills are necessary for enjoyment of the physical activity and leisure hours are utilized to some degree in putting the skill to use.
- ix. Be cognizant of the relationship of exercise, diet, and weight control. An understanding of what constitutes a desirable weight control programme and the role of exercise and diet in such a programme is desirable.
- x. Be knowledgeable about the role of sports in the nation's culture. Sports play a significant role in our culture, and therefore it is important to be informed as to the influence of sports on culture. Also, within reasonable limits, a person should be an intelligent spectator, as well as a skilled participant.
- xi. Have a body capable of meeting the demands of day to day living. It is important to have an understanding of such factors as physical fitness, the ingredients that make it up, and how it is maintained.
- xii. Understanding the concept of total health. An understanding and appreciation of what constitutes total fitness, including the mental, physical, and psychological aspects and the interrelationship of each, are important.

## **CHAPTER TWO**

### **ORGANISATION OF SPORTS COMPETITIONS AND TOURNAMENTS**

There are varieties of sports and sporting activities, of which competition can be organized. Some among these are the following:

**a)     **Athletics [Track and Field]****

- Sprints: 50m, 100m, 200m, 400m
- Middle Distance: 1,500m
- Long Distance: 3,00m, 5,000m
- Hurdles: 110m, 400m
- Relays: 4 x 100m, 4 x 200m, 4 x 400m, medley
- Field Events: Pole-vault, Long Jump, Discus, Javelin, Triple Jump, short-put and Hammer throw.

**b)     **Gymnastics****

- Calisthenics [rhythmic movements]
- Pair activities
- Floor activities [Stunt & Tumbings]
- Apparatus activities [gym buck, horse, box]
- Pyramid formation
- Activities, on jungle gym, ropes, ladder.

**c)     **Swimming****

20m, 30m, 50m, 100m, 200m, relays, in freestyle or front crawl, breast stroke, backstroke and butterfly.

**d)     **Team Sports****

- Soccer, Basketball, Handball, Volleyball, Cricket, Hockey.

**e)     **Racket Games****

- Tennis, Table Badminton, Squash Racket



- f) Individual Sports**  
- Billiards, Chess, Draft, Ayo, Monopoly
- g) Nigerian Sports**  
- Traditional wrestling, Langa
- h) Combat Sports**  
- Wrestling, Judo, Karate, Taekwando, Boxing.
- i) Dances**  
- Nigerian Cultural, Highlife Juju, Ballroom, Classic.
- j) Outdoor Sports**  
- Picnicking, Campfire, Mountaineering, Fishing, Canoeing.
- k) Children/Moonlight Play Activities**

## **2.1 Organizing Sports Competitions**

Physical education administrators/teachers and sports coordinators elementary, junior secondary and senior secondary levels should maximize pupils and students involvement in intramurals by recognizing and encouraging competition units. An organisational unit for the purpose of sport competitions has specific features that link member of the unit together. Such features include being of the same sex average age, being classmate, being of the same form or department, etc. When competitions are organized between units, participants put in their best so as to let down their unit. A sense of loyalty and commitment to common is developed in the individuals.

### **2.1.1 Competition units in schools can be described as:**

1. **Intra-class:-** i.e. competitions between members of the same class of say thirty pupils in JSS 1. The boys and the girls can compete in individual sports such as tennis, table tennis or combat game such that winners emerge at class level.

2. **Interclass:** i.e. competition between two or more classes “ of the same form or level. In a school where there are six arms of JSS II for example, competition can be organized between JSSII A, B, C, D, E & F. The competition could be in individual or team sports. A volleyball team can be raised in JSS IIA to face JSS IID and winner emerges to compete with winners from other classes.
3. **Inter-form:-** i.e. competition in which all the arms in a form or at a level e.g. JSS III facing the winners or selected team from the combined arms of JSS II. A team could raised from SSS II can play the players in SSS III for honours. A lot of enthusiasm goes with such competitions and skills as well as other attributes.
4. **Interdepartmental:** - i.e. competitions between recognised departments of the school. In many schools there are departments according to school subject discipline, Such department may be formed on subject group basis or specialization area e.g. To Regional Planning, Qs, BT, Food, & Nutrition, Marketing, Bus- Studies, Mass Comm e.t.c Physical and Health, or Such departments go by various names as they are formed for administrative convenience and given various names. When they compete in sports they demonstrate loyalty to their departments and all students become involved.
5. **Inter-societal** Competitions in sporting events can be organized as part of the activities of cultural, academic, religious or social societies and associations. The original purpose of forming the association could be specifically different from sports but they could introduce sports as part of activities that would promote their associations. In schools there are various groups such as Drama Club, Science Society, Geographical Society, Farmers Club, Economics Society, Voluntary Services Association, Red Cross, Boys Brigades Boys Scouts, Girls’ Guild, Christian Youth Fellowship, Muslim Students Union and many others. Sporting activities amongst them enrich intramurals.
6. **Sports Clubs:-** Clubs are formed on sport basis in man3l schools. School sports clubs often take an extramural dimension as they train specially to compete with outsiders. Such clubs are often made up of talented students who show capacity to be coached for higher level competitions. Clubs can have common areas o competition such as long distance running.
7. **Junior Versus Senior Classes:-** Competition could b’ between Junior classes and senior classes on departmental basis or at school level in general.

8. **Inter-house:-** Competitions can be organized between school 'houses'. Houses are formed in school and labelled: Red, Blue or after notable individuals who had contributed significantly to the development of the school. Inter-house sport is often misunderstood for one day athletic competition and prize giving day. Inter- house sports competitions should actually be organized in various individual and team sports so that large segments of students could be involved.
9. **Inter-dormitory:-** In primary and secondary schools with boarding facilities students stay in different dormitories or hostels, In tertiary institution they stay in halls of residence. Competitions can be organized on this basis.
10. **Other Units:-** Competition units can also be based on age, sex, weight, height, experience or exposure. Some games naturally have weight categories(boxing, wrestling, judo e.t.c) for competitive units. Age is also now a world-popular factor as we talk of under 10, under 12, under 15, under 17, under 21, under 23years. Schools can also organize sports competition for different age categories in various sports. Thus the scope of intramural sports is very wide for physical educators with proper motives.

### **2.1.2 Tournaments Drawing**

Tournaments are organized competitions between individuals and teams in a variety of sports. There are different types o tournaments that can be organized to cater for the interest of every category of participants. Tournaments can be grouped into four categories.

- a) Match Tournaments
- b) Elimination Tournaments
- c) League [Round – Robin] Tournaments
- d) Challenge Tournaments

Tournaments arrangement could be said to have two purposes in focus. These are [1] quick determination of winners and [2] maximum participation.

Classification of Tournaments Types According to speed of determining Winners and Length of Participation.

## Winners and Length of Participation

Least Participation	<u>Match Tournaments</u>	Fastest Decision of Winner
↑	Meets	↓
	Stratified Matches	
	<u>Eliminations</u>	
↑	Single	↓
	Single with Consolation	
	Double	↓
	<u>Round Robin</u>	
↑	Split	↓
	Single/Straight	
	Multiple	↓
	R. Robins/ Eliminate	
↑	Challenge	↓
	Ladder	
	Pyramid	↓
Maximum Participation	Funnel	Slowest decision of winners
	King/Crown	
	Round the clock	
	Spider web	

## Arrangement of Players in Sfrat Matches

- a. **Match Tournaments:** Match tournaments refer to competitions where all competitors are able to compete simultaneously. This tournament type can be used for some track and field athletics such as long distance races. There are two types.

**i Meets:-** Where participants are few they can contest at the same time but where they are many, they would have to meet at preliminary stages to prune down contestants for the final. In meets, winners are determined immediately while all others drop. It is the fastest to determine winner and the least in terms of allowing further participation.

- ii. **Stratified Matches:-** In this type of tournament, players of equal rank from opposing sides are made to play against each other. Each player competes against only one opponent throughout the competition. The coach of each side ranks his players from the strongest to the weakest. Size and weight may also be used in ranking. If there are eight participants from each side, they are ranked Nos. 1 in team A would play No 1 in and number 8 will play number 8. for each game the winner scores one point and the looser scores zero. The team with the higher scores wins the tournament. Stratified matches are used for dual games like badminton, tennis, table tennis, wrestling and boxing.

Team A	Rank		Rank	Team B
	1	V8	1	
	2	V8	2	
	3	V8	3	
	4	V8	4	
	5	V8	5	
	6	V8	6	
	7	V8	7	
	8	V8	8	

#### **Arrangement of players in stratified matches**

**B. Elimination Tournaments:** Elimination tournaments are popularly used in all individual and team sports like tennis, table tennis, badminton, volleyball, basketball, soccer and hockey. They are adopted in low level intramurals such as interclass, interdepartmental games as well as in high level international sports. They are designed to eliminate weaker teams or competitors at the preliminaries and progressive stages until there is a single winner. Generally elimination tournaments are organized where F 1] the time to produce the winner is limited or short, [ there are limited facilities such as courts, officials, transport, accommodation and other participant conveniences and [ where the registered individual/teams are many.

There are three basic variations of elimination tournaments. They are listed according to the amount of participation they allow.

- Single Elimination or Straight Elimination
- Fundamentals of Physical and Health Education
- Double elimination

## ii. Single Elimination with Consolation

In this type of tournament, any participant or team once defeated is out. The winner emerges as one who has not lost to anyone. As losing contestants drop out [ winners continue to play each other. The total number of matches is computed using the formula:

$$M = N - 1$$

Where  $M$  = the total number of matches

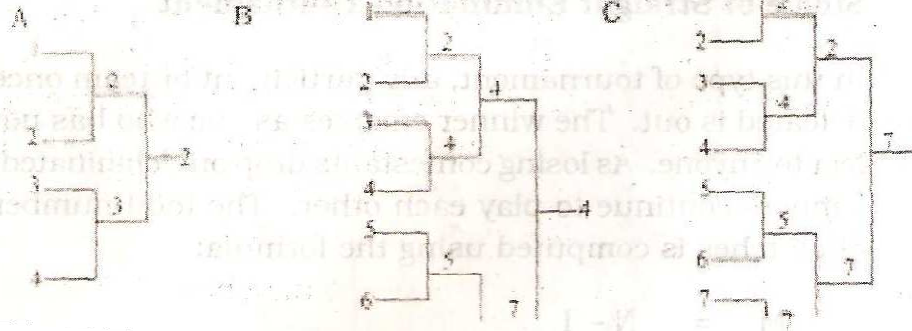
$N$  = the registered number of contestants or teams

For example, if there are 16 teams, the total number of matches organized will be  $M = 16 - 1 = 15$

Steps in Planning Single Elimination: In Planning single the following steps need be discussed.

1. Constructing The Tournament Bracket
2. Filling the Slots [a] Seeding [b] Byes [c] Draws
3. Numbering of Matches
1. **Constructing the Tournament Bracket:-** The number of contestants should be noted. The spaces in the first lines are known as Slots are short horizontal lines representing position of players/teams The number of slots in the first round should be a perfect power of two i.e. 2, 4, 8, 16, 32, 64

perfect power of two i.e. 2, 4, 8, 16, 32, 64



### 2.1.3 Tournament Brackets for four, eight And sixteen contestants

If the contestants are six, a tournament bracket of 8 slots is constructed. If they are 23, a bracket of 32 slots is constructed as 23 is more than 16 and the next power of two above 23 is 32. In a 32 slot bracket and where there are 23 contestants there would be 9 blank slots in the first round. These are called by a bye occurs when there is no competitor to meet in that round. It therefore means 9 of the 23 teams have no opponent in the first round. Only 14 teams will play- 7 matches. Single elimination fixtures are drawn such that all byes are eliminated after the first round. The number of teams for the second and subsequent rounds should be a perfect of two.

The convention is that after determining the size of the bracket, the tournament organizer/director arranges the first round slots in a vertical column. Vertical lines are added to the right to connect each pair of slots. Winners advance to the right of the bracket until the final winner emerges at the right hand apex of the bracket undefeated.

2. **Filling the Slots:-** Three considerations in filling the slots ‘ seeding, byes and draws.

**a. Seeding:-** Seeding is a conventional practice in scheduling elimination tournaments.

Seeding means names of relatively good players or teams in such a way L the best players will not meet first so as not to knock out themselves at the preliminaries or early rounds. This accepted practice prevents a notable team from losing to a weaker team. Accidentally the stronger team has a bad day. Usually seeded teams are put on the bracket such that they do not meet until the last rounds to play. Some factors considered in seeding teams or top players are

- i past performance, experience or popularity
- ii. the present form i.e. intensity of training, camping
- iii. Objective rating

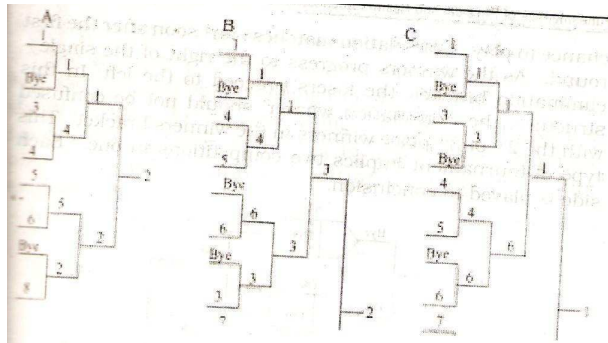
The seeded teams are placed on top, middle and lower slots of the bracket. The relatively best player is placed at the second best at the lower slot and the third best at the middle. Normally, not more than one-quarter of contest should be seeded. If seeded players would perform as expected all should be playing at semi-finals. Where there is no adequate information about the performances of team or where the teams resist accepting the superiority of any other team. Seeding should be avoided. For example at intervarsity games; no form of seeding can be suggested. For school intramurals, seeding has to be practiced to allow weaker participant to have more opportunities.

**b. Byes:-** When the number of competitors is not a perfect power of two, byes are put in the number of slots left in the bracket. Seeded teams are first indicated on the slots against the byes or we say they receive the first byes which implies they will not play in the first round. All seeded teams given byes should be put in place before the names of non-seeded players are drawn for the remaining slots, e.g. if 9 teams are competing, there would be 16 slots in the bracket and 7 byes. If 3 teams are seeded, they are assigned the first byes, others take draws. In the process they [ may take the other byes or fixed to meet, a team in the first round.



- c. **Draws:-** Drawing is the designation or assignment of players to the remaining slots after the seeded teams have been assigned byes. This exercise is carried out using a variety of methods depending on what the organizers agreed is convenient. It could be by ballot, random picking of concealed numbers, serial order or alphabetical order of names. The use of concealed numbers is often practiced. Any method that must be used should be agreed to by organizers and team leaders. It must also be objective and impartially used.

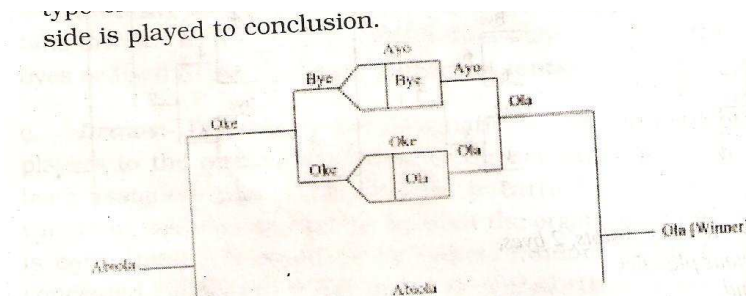
**3. Numbering of Matches:-** There is the need to number the matches so that teams will be guided as to the playing schedule. On the tournament bracket, the numbers matches are placed where vertical lines connecting the slots indicate a match is being played. The principle of numbering is to proceed down the column in each successive round of matches. If a large sheet is used, the time and venue can be written along each number of proper guidance.



- A. 6 teams – 8 slots, 2 byes  
4 teams play first  
Round
- B. 11 team: 16 slots  
5 byes 6 teams play first  
Round
- C. 9 teams, 16 slots. 7  
Byes, no seeding only 2  
Teams play a match in the  
First round

## Single Elimination with Consolation

Consolation literally means 'constructive sympathy'. In this type elimination tournament, a loser's bracket is type for all those who lost their matches. This tournament more allow for more participation as this consolation bracket ensures that each of the first round losers has at least another chance to play. Consolation matches start soon after the first round. As the winners progress to the right of the single - elimination bracket, the losers proceed to the left. In this structure, the 'consolation winner' should not be confused with the 2<sup>nd</sup> or 3<sup>rd</sup> place winners in the winners bracket. This type of tournament implies two competitions in one. Each side is played to conclusion.



A Seven Team Single Elimination with Consolation.

### iii. Double Elimination Tournaments

In double elimination tournaments, a contestant does not go out of the competition until he has lost twice. This structure is significantly different from single elimination with consolation. While a contestant would loose a second time in the consolation bracket before going out of the competition, in double elimination, a player at any stage of the competition remains in contending position until he loses twice. That winner in double elimination is not one who has not suffered any defeat though it is possible, but one who never concede( a second This structure permits greater participation. The number of matches is computed as

$$1. \quad M = 2N - 1 \text{ [maximum] or}$$

$$2. \quad M = 2N - 2 \text{ [minimum]}$$

**Determining the Winner With a Rematch:-** Towards the end of the tournament when most teams have lost twice, the winner left-side bracket is brought back around to play the winner on the right side as he has not lost a second time. If incidentally he wins, the man on the right-side bracket would have lost only once. This is when a rematch has to be played between them to allow the winner on the right side to lose a second time. The winner of the rematch then becomes the winner of the double elimination tournament.

19

## 2.2 ROUND-ROBIN TOURNAMENT

Round-robin tournament affords the teams or individuals long participation as every team plays every other team. As the name suggests a team plays round all others. Every team could have had the opportunity of meeting and defeating the eventual champion. Though participation is maximized, round robin is not without its problems. Teams that stand chance of winning may lose interest and withdraw before end. It is time consuming and so unsuitable for large number of contestants particularly if they are more than 8 in a division or group. As a type of tournament most suitable for selecting the most reliable teams or player, it is used to decide the best zonal or state levels amongst winners of elimination 5cr! at local level. The Nigerian National League is played on round robin between the various divisions. At international le such as World Cup competition in soccer, round robin is u with different groups of qualifiers before quarter and semi finals are decided by elimination

### 1. Tournament Organisation for Single/straight Round Robin:

As the registered teams or players have to play each other, Is given an identifying number, say 1 to 8. the numbers arranged in vertical pairs such that they rotate clock of the rounds of play while number 1 remains on The upper left position in the vertical pairing is known as the 'robin'. Other numbers rotate round the robin position number of participating is even, the robin position If the number of contestant is odd, an X is placed at hand corner and number 1 team draws bye in Pound. The Single/straight round robin has the type of arrangement below.

Rd I	Rd II	Rd III	Rd IV	Rd V	Rd VI	Rd VII
1 Vs 2	1 Vs 8	1 Vs 7	1 Vs 6	1 Vs 5	1 Vs 4	1 Vs 3
3 Vs 3	7 Vs 2	6 Vs 8	5 Vs 7	4 Vs 6	3 Vs 5	2 Vs 4
7 Vs 4	6 Vs 3	5 Vs 2	4 Vs 8	3 Vs 7	2 Vs 6	8 Vs 5
5 Vs 5	5 Vs 4	4 Vs 3	3 Vs 2	2 Vs 8	8 Vs 7	7 Vs 6

**Round Robin Tournament Arrangement for Even Number of Teams or Players [8]**

Rd I	Rd II	Rd III	Rd IV	Rd V	Rd VI	Rd VII
X Vs 1	X Vs 7	X Vs 6	X Vs 5	X Vs 4	X Vs 3	X Vs 2
7 Vs 2	6 Vs 1	5 Vs 7	4 Vs 6	3 Vs 5	2 Vs 4	1 Vs 3
6 Vs 3	5 Vs 2	4 Vs 1	3 Vs 7	2 Vs 6	1 Vs 5	7 Vs 4
5 Vs 4	4 Vs 3	3 Vs 2	2 Vs 1	1 Vs 7	7 Vs 6	6 Vs 5

### Round robin tournament arrangement for odd number of team or player (7)

**Number of Games for Round Robin:** the number of matches to be organized is computer as

$$M = \frac{N(N-1)}{2}$$

2

For eight teams it is  $\frac{N(N-1)}{2} = \frac{8(7)}{2} = 4 \times 7$  matches

2

2

For ten teams is  $\frac{10(9)}{2} = 5 \times 9 = 45$  matches

2

For 11 players it is  $11(10) = 11 \times 5 = 55$  matches

ii. **The Split Round Robin:** Where teams of players competing are many they are divided into two. If in a assemble during vacation, Local Education District assemble schools for intercollegiate competitions, the player could be so many that a straight round robin may be to they 0 and time o If say there are 19 team robin k)e split into 10 and 9. Each group will play round winner two leading winners meet to determine the final into winner and runners up. By splitting the straight round rol organize and lower lights the number of matches to reduced by half.

Example

19 teams =  $\frac{19(18)}{2} = 19 \times 9 = 171$  matches [Straight robbin]

10 teams  $\frac{10(9)}{2} = 5 \times 9$  matches [Upper Flight]

9 teams  $\frac{9(8)}{2} = 9 \times 4 = 36$  matches [Upper Flight]

Total for spilt =  $45 + 36 = 81$  matches

Number of matches saved =  $171 - 81 = 90$  matches (Minus play off]

**Multiple Round Robin:-** Where the number of teams or s are few, a straight round robin may be repeated two or three times to facilitate much longer participation, growing experience for players and selection of outstanding, consistent player for higher level competitions.

**League Score Table:-** As each round is completed a round score table is updated to show the relative performance , The score table is below where:

P = Number of matches played

W = Number of games won

D = Number of games drawn

L = Number of games lost

L = Number of goals for [ in favour]

GF = Number of Goals against [goals conceded ] Goals difference

GD = Goals difference

Pts = Number of point made in the matches {at school level, 2 pts. For a win, 1 for a draw and 0 for a loss]

TEAMS	P	W	D	L	GF	GA	GD	PTS	POSITION
A									
B									
C									
D									
E									

## D. Challenge Tournaments

All challenge tournaments operate on the principle of player ranking. A lower-ranked player challenges a higher — ranked player with the hope of exchanging ranks. Individual competitors try to move through the ranks to the highest position. Challenge tournaments can run as long as the director, club or participants desire but a balance should be struck between maximum amount of participation and maintenance of interest. Challenge tournaments are mostly used in individual sports and are rarely used in team sports.

There are several types of challenge tournaments suitable for different situations and games. Six common ones are

1. Ladder tournament
2. Pyramid tournament
3. Spider Web tournament
4. Crown tournament
5. Funnel system tournament
6. Round – the- clock tournament

1. **Ladder Tournament:-** This type of tournament schedule takes its name from the fact that its structure is like a ladder. Players are ranked and arranged on the rungs of the ladder. A ladder works best where there are 6-10 participants. Some clubs may have two or three skill - level or categories of ladder system i.e. the skilled players have their own ladder and the novices have theirs. Category C can eventually advance to category A ladder.

**Organization:-** The organiser ranks all registered players right from their previous performance. The better player should be placed at the lower rungs of the ladder they challenge up. To place them on the highest rung will stagnate the competition quickly. If the highest level player plays up the ladder, it will also ensure the participation of most players. The ladder could be a plank on pegs project and small planks on which names are written and hanged on the pegs for easy removal and replacement. The ladder could be a flat plank with resin in which names are written on planks or cardboards that are slotted in or pulled out. The tournament structure should be put in a showcase and properly protected from mischievous shuffling of names..

**Regulation for Ladder Tournaments:-** Regulations vary i %9urnament to tournament but all participants be well informed as they operate the schedule themselves. . Common regulations are:

1. Players can challenge only one or two positions higher than themselves.
2. A challenge is considered valid if the player above has been properly notified. Method of notification should be specific.
3. Higher - ranked players who do not respond to a challenge within specified date [usually two days] forfeit their position to the challenger.
4. A player who is challenged must play that match before challenging up the ladder.
5. Once a challenge is played, the challenged player may have one week to challenge up before being challenged' again.
6. All positions are frozen at midnight on the final day of play. Any challenges pending at that time are not considered valid.

**2. Pyramid Tournament:** This challenge tournament is like the ladder but it is more sophisticated and more relaxed as a player could challenge both horizontally and vertically

Names of players are ranked on the pyramid with the number of players decreasing by one at the successive levels of the pyramid. The top of the pyramid is the highest ranking position. All players try to move to the highest position by challenging up the pyramid. A player must however first challenge and defeat a player horizontally before challenging any of the players at the next level. Challenge is therefore more flexible than ladder. Players arrange their matches. The tournament director only had to do the initial ranking and prepare the pyramid structure. His responsibility is to adjust the ranks of players as each results are reported. The numbering shows soft ranking at each level. Regulations for challenging players are similar to those of the ladder.

**3. Spider Web Tournament:..** The spider web tournament takes its name from the bracket structure. The championship position is in the centre of the web. Five or more radial lines, [depending on the number of competitors] radiate for the centre. Concentric lines are made to cross these radial lines. Players are ranked and placed on each concentric line. Challenges can be



made by persons on and concentric line to any person on the next the closer to the centre. The spider web has the disadvantage of the centre man having many challenges.

**4. Crown (or king) Tournament:** This tournament schedule consists of a series of Pyramids. It caters for more participants. The topmost: winner in a lower pyramid enters the next pyramid and challenged on until he gets to the peak of the topmost pyramid - a position known as the crown or king.

**5. Funnel Tournament:-** This tournament structure combines the ladder and the pyramid systems. The contestants follow the pyramid rules and a few top players use the ladder rules. It is the funnel shaped upside down. This type of structure caters for large number of competitors at the pyramid level and ensures there is a thorough challenge at the ladder stage to pick the best player.

**6. Round the Clock Tournament:-** In this type of challenge, players are ranked and positioned in a clock-wise manner from 1 – 12. No. 1 challenges No.2 until he moves round the clock where No. 12 is the winner. The face of the clock could be expanded to accommodate more participants.

## **CHAPTER THREE**

### **RECREATION**

#### **3.1 Concept of Recreation**

The term recreation comes from the Latin word *recreation*, meaning that which refreshes or restores. Max Kaplan is of opinion that recreation has been as a period of light and restful activity, voluntarily chosen, which restores one from heavy, obligatory activity or work.

A modern point of view was expressed by Sebastian Grazia, described recreation as activity that rests men from work, by giving them a change and restores them from work. When adults play as they do, of course, with persons, things and symbols — they play for recreations. Like the Romans, own conception of leisure is mainly re-creative”.

However, Richard Kraus feels this concept of recreation lacks acceptability today. First, as most modern work in modern society becomes less demanding, many people become more y engaged, both physically and mentally, recreation which is primarily intended to restore one from work has no meaning such groups unlike ageing persons who have no work but who certainly need recreation to make their lives meaningful”.

Recreation therefore can be defined as any enjoyable leisure experience in which participants voluntarily engage in and from which they receive immediate satisfaction.

Recreation may be thought of as activity voluntarily engaged in during leisure and primarily motivated by the satisfaction pleasure derived from there.

Recreation is the natural expression of human interests and needs seeking satisfaction or pleasure” as stated by Gerald B. Fitzgerald.

Motivation is most often the decisive factor that determines the recreation nature of the activity or experience. If individual participate in an activity for the sheer fun of doing so, it is recreation, if he does it out of compulsion or need of money, then it is work.

Recreation has become a major source of employment in recent times for large numbers of people in the rapidly increasing “leisure economic and parks industry.

Hence, recreation becomes more than just an activity. It refers to all government agencies and institutions that have been formed to meet the recreation and leisure needs of our society.

The society has accepted recreation, along with leisure, as the terms most applicable to the broad field of leisure services, and experiences including such institutional forms as community agencies, professional organisations and occupational involvement.

In a nutshell, recreation is concerned with those activities in which a person participates during hours other than work. This implies that the individual has certain activities in which to voluntarily engage in because of an inner, self-motivated desire, such participation gives a satisfying experience and develops physical, social, mental and aesthetic qualities contributing to a better existence.

The characteristics of recreation could be described as follows

**a) Leisure Time:-** To be recreation, the activity must be engaged in during one’s free time. Therefore, work can not be one’s recreation;

**b) Enjoyable:-** The activity must be enjoyable to the participants.

**c) Constructive:-** It is not harmful to the person physically

**d) Voluntary:-** The activities must be chosen from the participants volition.

**e) Non-survival:** Eating and sleeping are not recreational activities themselves, one may engage in picnic in which a dinner is involved, but other facts of the affair, such as the social games and fellowship, are important parts of recreational activity.

**f) Morally Sound:-** The activity must be morally sound and not profane or obscene in disposition.

**g)** The activity should have the potential to make a significant contribution to the well-being of the individual and to the society as a whole.

h) It must meet certain basic human needs and interest, otherwise, it won't be satisfying.

During the past few decades, however, recreation in its various has expanded to an unprecedented degree. Extensive land and water areas have been set aside for recreational use, facilities for a wide range of recreation activities have been developed: new forms of recreation have been devised. The desire for recreation opportunities is so widespread nowadays.

Among all people in all stages of history, man has outlet for self-expression and personal development in forms of creation which have a striking similarity. Recreation is a common heritage of all people, although its expression takes varied form, in all kinds, play is the chief occupation of the young child during his working hours. It is the major business of life for him. It is the nature's way of affording outlets to the great biological urge for activity and the means of acquiring skills needed in later life. At play the child does a variety of interesting things with complete absorption.

Everyone wishes to be happy. Happiness was recognized even by our forefathers as a fundamental and worthy objective for individual. When sought consciously as an end in itself, it is most elusive. For happiness is essentially a by-product which can best be achieved in a balanced life and recreation holds an important place in balanced life along with work, rest, love, and worship, life would indeed be incomplete and dull without recreation. Hence, recreation is a fundamental and universal human need.

In addition to the above, recreation is a playful and relaxing engagement outside one's normal daily activity. It includes participation in activities that are non-professional to the individual concerned. It involves activities which are diversionary intent. It seeks to occupy a recreator in a role different from his occupational routine. This means that work from which an individual earns his livelihood is not a recreation for him. Recreation has been variously defined, some regard as refreshment diversion, others have merely considered the antithesis of work or antipodal to work. A renowned creationist, Buddlar identified recreation to include play in every expression.

Recreation is engaged in by many people for the main purpose utilizing their spare time. Others are in it for intrinsic value, some just to escape from the boredom of a job. Many people are in

creation for fun and relaxation. If sports are involved there is no stress, no emphasis on winning, be it dual or team games.

There are people who engage in recreation to dissipate surplus muscular energy. By playing and recreating, the individual lets off piled up steam. It is not unusual for people to take recreation when annoyed with someone. The objectives of such recreation are to use it as a safety valve. This can be identified as cathartic theories of recreation. The concept of recreation is vital if the society must reduce the incidence of high blood pressure and other degenerative diseases. Relaxation can be achieved not always through physical exertion or exercise but through reading novels, watching comedy, playing ludo, card games, watching comedy from a vision. Recreation has health objectives, participation in physical and mental activities improves the health of the participants. It provides enjoyment and satisfaction to the successful participants. There is also the joy of self expression and fun in participation. The effort by doing it by oneself is enough to guarantee satisfaction.

In schools and government establishments, recreation creates moral, provides the opportunity to become acquainted with greater numbers of fellow employees and to know them better. It also promotes a closer association among fellow workers and between employees and management. The emphasis which recreation seeks to achieve is on physical fitness. Clerical workers and teachers both teaching staff and non-teaching staff need to be very fit in order to perform optimally in their respective duties. Recreation is a basic need of man because it contributes to the physical, social, emotional as well as mental well-being of man. The scope of recreation is very wide.

Apart from Athletics and other physical activities, others include activities like gardening, music, drawing and painting, sewing, photographing, going to the cinema, reading and writing for pleasure, visiting friends. In fact, recreation has wider dimensions than physical education. Although what is recreation for one person may be work for another person. For instance a football or boxer could do gardening as a recreation whereas professional gardener can take up tennis, football, playing musical instruments as forms of recreation.

### 3.2 Values of Recreation

**1. Physical Health:** Today, extensive use of motorized transportation, sedentary work, popularity of spectatorial sports automation and other energy consuming devices have resulted in large number of people not having 5 exercise in their daily routine. Though it has not been proven that physical activities can prevent diseases, however, researches show that it can improve human organic efficiency like the cardio-vascular and muscular systems.

Recreation is an antidote to boredom and body fatigue. Work leads to an expenditure of energy and production of lactic acid which is in itself suffocating to the body. As we recreate, tensions both of the body and the mind are released. This brings refreshment, relaxation, 'sense of euphoria and builds up recuperation. Physiologically, such refreshment reduces fatigability and thereby yields the dividend of maintaining body balance and equilibrium

**Promotion of Good Health:-** Health is wealth. The fact that participation in wholesome forms of recreation contributes to the physical well-being of the individual is widely recognized. Medical authorities test if that big 'muscle activity stimulates growth and is absolutely essential for the growing child and that athletics helps to develop honesty, fair play, patience, courage, justice and predictability. These are components of character training and they lead to self discipline which is a prelude to good leadership.

**Safety:-** Safety officials consider that adequate provision for recreation, especially in the form of playgrounds under leadership, supervised swimming and sports centres, contribute definitely to the reduction of accidents. Recreation areas that are properly designed and carefully operated are remarkably safe. Areas like diving boards and the deep section of the pool require special attention. Constant vigilance is required on the part of the lifeguards to prevent accidents and to render prompt assistance to swimmers who need it.

Rules must be strictly enforced, life-saving and first - aid equipment must be constantly available and in good condition, and workers must be instructed as to the procedure to be followed in case of serious accidents. , of incidents must be kept and actions taken for future improvement of the centre.

**Morale:-** At normal times and under favourable conditions, people need inspiration to keep from becoming mentally and emotionally stale. In periods of Insecurity, depression and unusual strain, man is more than ever in need of activity which brings satisfaction and a sense of accomplishment. One of the forces making for individual and community morale during the prolonged period of depression was the increased opportunity for recreation afforded by work-relief programmes for the unemployed. When there is crisis following earthquakes floods and other large — scale disasters, recreation will help people stay alive.

The senior citizens are not left in this regard because they can always be involved in crisis periods. Menninger, stressed that “People who stay young despite their years do so because of an active interest that provides satisfaction through participation.

5. **Democracy:-** It is important to state how free a person is in choosing a particular recreational activity. Democracy and recreation are alike in spirit, and each tends to promote and strengthen the other. Democracy is committed to giving each individual the opportunity to grow fully, express himself freely, and achieve an abundant life Recreation, which represents activity freely chosen, and which offers the individual the opportunity for genuine satisfaction, creative expression and the development of his powers helps him attain the objectives of democracy. it contributes to his effectiveness as a citizen in the modern democratic state. A properly conducted recreational activity can be used to build a physically strong people and to develop loyalty to the state

Participation in activities leads to the acquisition of democratic principles such as sharing of respect for and acceptance of other people’s views. Recreation and democracy are alike in spirit and both give room for full development. As recreators interact with one another ideas are shared and unity is fostered among them.

6. **Education:-** Recreation is educative. Some recreational activities offer opportunities for learning new concepts. These go to enrich and update the recreator’s knowledge. Most of the early ideas children imbibe stem from plays through their siblings and playmates. Teachers often capitalize on such early experiences and use them as stepping stone for teaching new concepts.

Recreation is an important resource for educational r growth and development.

**Development of Skills:-** Participants in recreational activities can develop many survival skills like, language 2 perception and motor skills. Some other are: counting, calculating, knowledge and reasoning skills.

**Acquisition of Knowledge:-** Recreation contributes in many and varied ways to the acquisition of factual knowledge. Philately provides opportunities for the study of historical, geographical and scientific facts. Rock collectors acquire some idea of geology. Ornithology and gardening provide avenues for the study of nature. We can learn, about coastal morphology, tides and marine life when fishing for recreation.

**7. Prevention and Control of Crimes:-** It has been observed that most crimes are committed during ones idle period. Many view express opinion that recreation possesses the value of reducing youthful infringement on the social and moral code. In the same manner, adult crimes are brought under control.

We know that taking part or participation in wholesome recreation helps to build character, recreation is obviously a potent agent in the prevention of crime and delinquency. Because recreation activities have a strong appeal for children and youth, delinquency is less likely to flourish in. communities where opportunities for wholesome recreation are abundant and attractive than in cities or neighbourhoods where adequate facilities are lacking. If they are busy in he recreation centre, they cannot at the same time be thinking of crime elsewhere. Because of the fun they derive and the interests developed with the activities, the chance that children will become criminals is materially reduced.

**8. Psychological Benefits:-** Gesel [1959] Freud [1960] stressed that emotions are not foreign intrusions but part and parcel of the unitary action system. Emotionally upset individual feel generally frustrated, have negative attitude to life and are often apathetic. People who are frequently unhappy, tensed and withdrawing may develop mental problems like antisocial or psychosis.

No doubt the detrimental effect on national development if a sizable number of the citizens become sudden psychological wrecks. We can be sure that there could be no order or progress in such a society. The rising incidence of crime, drug abuse, students unrest and sex abuse are not



indices of national growth. These could be escape — mechanism from the frustrations of life or the result of poor self concept. Such people can develop the habit of self-discipline, perseverance and moral sense through recreation.

Most leaders in the field agree that participation in some form of recreation is a psychological necessity for most people.

**Relaxation:-** After hours of routine work causing mental, physical and psychological stress, the body naturally needs some respite. Recreation becomes the catharsis during such experience.

**Self Actualization:-** Psychologists agree that recreation provides the self confidence that enables people to develop their full potential and withstand life's problems and disappointments by providing feelings of personal worth.

**Escape Mechanism:-** Recreation is the “Opium” of life. The old fashioned dependence on alcohol or other drugs as a means of escaping from problems is dangerous to health. Instead, immersion in recreation activity can give effective [ temporary] relief from the unpleasant realities of daily living.

Recreation has been recognised in its aid in the prevention of mental illness and rehabilitation of mentally ill people. Recreation provides channels for dissipation of pent-up emotions like frustrations, petty worries and unnecessary concerns. These may be forgotten when the player or participant focuses his attention in the act he is partaking in.

Many psychiatrists agree that recreation is essential to the mental health of all individuals. A well-known psychiatric Menniger believes strongly that recreation is essent to healthy living. He stresses that hobbies, games and sports are of great importance in maintenance of emotional health.

**9. Psychotherapeutic Benefits:-** Recreation services can be used to promote the growth and development of the individual recreation helps to dispel patients from the threat of isolation and social rejection that it encourages timid, disarms the aggressive motivates the lethargic, diverts the melancholic and calms the restless.

Recreation can therefore serve as a valuable tool in rehabilitation process or for purposeful intervention in some physical emotional and/or social behaviour.

**10. Social Benefits:-** The effects of recreation on social development of the individual and society are predominantly beneficial. Since it promote interpersonal relations affords opportunities for human relations, and the understanding of the different cultures of the people. These will enhance national integration. In this difficult times people can get comfort and satisfaction by engaging in appropriate recreational activities. It is said that an idle mind is the workshop of the devil. Some of the social problems of our society could have been on the decline if our youth can cultivate constructively use of leisure.

Recreation is socially significant in manifold ways. It can strengthen inter-personal relationships, provides mutual enjoyment and socio-cultural interactions. Recreation promotes social acquaintances and feelings of group solidarity and concord.

Group recreation provides the opportunity for people to meet iamental human needs. According to Jeiselä Konopka, ‘Next to the biological necessities, man’s deepest longings to love and to be important to someone’. Dr. Konopka points out that this important need can be met through a group life.

## **CHAPTER FOUR**

### **HEALTH EDUCATION**

#### **4.1 Introduction**

The inclusion of Health Education in the School Curriculum not just done for the students to read the contents of the subject, pass it and obtain certificate. Health is studied to discover the health problem one will probably have to solve, and to acquire sufficient knowledge of the nature of man and his social and physical environment to make sound health decisions. In the study of health, however, the following goals should be expected:

1. Learning ways to further develop physical capacity, stamina, mental efficiency, and attractive personality.
2. Acquisition of basic scientific knowledge that will enable you to establish and maintain a healthy and happy family, and meet your future responsibility as an educated person.
3. Acquiring knowledge of physical, mental and emotional health that will be of aid in the future understanding of other people and in your relationship with them.

#### **4.2 Meaning of Health Education**

Perhaps the use of the term “education of Health” will provide a better perspective on the concept of education. The term implies that as an education process, health education is essentially a social process through which individuals acquire knowledge, skills and dispositions relating to the improvement and maintenance of their health and that of other people. It is an instrument of transmitting values to the end that individuals or group understand, accept and adjust : to healthful living standards.

Health education forms an integral part of health services. The other components include curative, preventive, special services and statistics. These components are however interrelated. It is a key element in any health system and indeed one of the eight components of Primary Health Care that is concerned with promoting health behaviour. To some people that are not

health educators, health education is believed to be a process of disseminating or imparting health information to patients at health care facilities.

Ross and Mico defined the term to be educational oriented process or planned change which focuses on those behaviour that directly or indirectly affect people's health. In the word of Ademuwagun [1975} heath education was defined as embracing knowledge,. attitude and practices which is concerned with the study 'of consumers behaviour towards diseases and health 'Problems as well as, their reaction towards health programmes and the dispensers of health services in the consumers total environmental setting. It is also concerned with the use of educational processes, Including consumer participation, and of motivational facilitating and helping methods and techniques paying particular attention to the total setting of the Consumers, to bring about positive health behaviour.

Health education is much more than imparting health information. It could be seen as people knowledge, attitude and practices, as well as reaction to health, diseases, Health workers, environment and health programmes must be positively influenced with the view to bringing about positive observable and measurable changes before we can claim that health education has taken place. Even the two claim could only be valid if the method used are such that it result in making the consumers to internalize and sustain the positive change in behaviour with consequent benefits to the consumers in form of enhanced health status or other aspects of socio-economic development.

#### **4.2.1 Factors that Determine Health**

Four major factors have been identified as the determinants of health. These factors are personal health behaviour, biological influences, the condition of the physical environment and the quality of health care services.

#### **4.2.2 Personal Health Behaviour**

These are sections you take that affect your health. Studies has shown that there are certain behaviours that promote good health and tend to increase average length of life. Among such behaviours are:-

1. Sleeping seven to eight hours daily;
2. Not smoking cigarettes;
3. Drinking alcohol in moderation or not at all
4. Maintaining normal weight.
5. Getting regular physical exercise.
6. Eating breakfast almost everyday and
7. Rarely eating between meals.

Those who practice most or all of these 1 are better in physical and niental health than tho.s,e who follow a few or none.

#### **4.2.3 Biological Influences [Heredity]**

Heredity is the passing of traits biologically from parent to child. On some occasions, one's ability to diseases could be limited by heredity and by personal factors. For instance, If there is trace of heart disease in someone's family, the individuals less able to prevent heart disease. Diseases such as sickle cell, anaemia is also hereditary. Sometimes, disability such as hunch-back can limit individuals ability to exercise.

#### **4.2.4 The Physical Environment**

This is the physical surroundings, any place in you live, work, or play. Problems such as air pollution, may increase the chance of developing lung disorders, or worsen a condition such as asthma. Water pollution, noise, over-crowding in living places, contaminated food are some of the examples of factor in the environment that can negatively affects health.

#### **4.2.5 Health Care Services**

The quality of the available health care also helps determine the quality of general health. Regular medical and dental care, check-up, quality and member of medical personnel available and the availability of facilities to work also determines the health.

### **4.3 PERSONAL HEALTH CARE**

Personal health Is an important aspect of health. It deals essentially, with how individuals take care of their physical body parts such as the skin, hair, nails and teeth. Taking proper care of one's appearance could make a big difference in other people's perception of the concern person.

#### **4.3.1 The Skin**

Is the largest organ of the body. It has four major functions:-

- i Protection
- ii. Temperature regulations
- iii. Waste removal, and
- iv. Sensation

To keep a healthy skin, the following are among the practices necessary

- a) Washing the body regularly
- b) Using skin care products in moderation,
- c) Taking a good notice of the ingredients of any cosmetic or products use, and understanding them.
- d) Soaking in a bath for too long should be voided, so as to protect the skin moisture.
- e) Applying a moisturizer to skin after washing to help retain moisture.
- f) Eating balance diet
- g) Avoiding smoking
- h) Drinking plenty of water
- i) Getting enough sleep
- j) Avoiding hot weather and sun burn.

#### **4.3.4 Hair Care**

The hair shaft that emerges from the epidermis is made up of hardened dead cells. Because the hair cells are dead, it does not hurt to have your hair cut.

Regular or occasional cutting of the hair is a good health practice. However, the key to keeping the hair looking healthy is to keep it clean, brushed and free from tangle. Application of shampoo should be moderate and if applied, the hair should be thoroughly rinsed.

Combing and brushing is an important aspect of hair grooming. Regular brushing stimulates the circulation of blood to your scalp and also spread the natural oils over the hair helping it to shine. Dying or bleaching of hair colour should be done carefully if found necessary because some of the products used for this purposes contain chemicals that are dangerous to the scalp.

#### **4.3.5 Removing the Hair:- It is obvious that many people**

Include hair removal in their grooming routine, Methods used include; cutting, shaving, depilatories [hair removing cream], lotion paste or spray method.

**4.3.6 Care of the Nails:-** The finger-nails and the nails serve as buffers against blows and thus they protect the sensitive tips of your fingers and toes. Washing with scalp helps get rid of the disease — causing germs that collect under the fingernails. Regular fingernails and toenails cut is a good health practice. Also, trimming nails is a sign of good personal grooming. To prevent foot problems, it is important to wear shoes that fit properly. Shoes that do not fit can rub the skin and cause hard skin called corns.

**4.3.7 Some Common Skin Problems:-** Skin problems are very common. Some stem from the natural processes occur in the body as one develop into an adult stage. Other causes could be as a result of germs, injury environmental conditions. Some of these problems be avoided and/or care for through simple first aid. A dermatologist's [doctor who treats skin disorders] could be needed for serious problems.

The following are some of the common skin disorders:

**Pimple:-** This is a blocked pore that is inflamed and infected. It may be filled with pus.

**Eczema:-** It is the swelling and redness of the skin, including blisters and itching usually caused by allergic reaction.

**Hives:-** These are bumps on the surface of the skin usually caused by an allergic reaction to food or medicine.

**Boil:-** Is a hard, red lump that is tender to the touch and is caused by an infected hair follicle.

**Impetigo:-** Is a skin infection caused by bacteria and characterised by small blisters that form yellow crusts.

**Ring Worm:-** This disease gets its name from the way it looks; it is not caused by a worm. It is a fungus that causes red, scaly, round patches. It is communicable.

**Athlete's Foot:-** This is an irritating [ sometimes painful] fungal infection of the moist skin under and between the toes.

### 3.8 The Teeth

A bright smile begins with clean teeth. Healthy teeth are important to appearance. Each tooth has three main parts.

1. **The Crown:-** The part of the tooth that is above the gum line:
2. **The Neck:-** The part where the crown and the root joined just below the gum line; and
3. **The Root:-** The part below the gum line that fits into the jawbones [ Maxilla and Mandible].

A normal set of an adult teeth is thirty — two [ in this o

- |    |            |   |    |                     |
|----|------------|---|----|---------------------|
| a) | Incisors   | - | 8  | 4 upper and 4 lower |
| b) | Canine     | - | 4  | 2 upper and 2 lower |
| c) | Pre-Molars | - | 8  | 4 upper and 4 lower |
| d) | Molars     | - | 12 | 6 upper and 6 lower |

The teeth have an important role in preparing food for use in the body. Each tooth type performs a certain task;

Incisors - The sharp front teeth used for cutting food.

Canine - They are pointed teeth that tear food into pieces.



IR - Double-point teeth that tear and crush food.

Molar - These are large teeth with several rounded points that grind food into bits.

#### **4.3.9 Dental Care**

Good dental care begins with careful selection of the food one eats. Eating balanced diet everyday plays an important role prevention of dental decay, and keeping the gum healthy.

A regular dental check-up is essential for the prevention of tooth and gum disease. Check-ups should be on regular basis, once or twice a year or as suggested by the dentist.

## **CHAPTER FIVE**

### **HEALTHFUL LIVING**

#### **5.0 INTRODUCTION**

This chapter precisely deals with some topics that are concerned with healthful living of individuals. It includes community health and its components; mental and emotional health and the health of the children in the school community.

#### **5.1 Community Health**

Health is a system of health services, which are designed to promote the healthy standard of living, prevention and treatment of diseases.

Community health could be defined as the science and act of one preventing the diseases, prolonging life, promoting health and efficiently through organized community efforts.

Community Health Care is therefore the process taken or directed for the maintenance of the optimal social, mental, physical and emotional well-being of the people living in a defined geographical area interacting and sharing common interest, values, culture, customs etc. Community health education aims at making people in the community to be health conscious, well informed and motivated to take actions about their health problems.

Health education services are to encourage and ensure the co-operation, participation and involvement of the health consumers in the provision and utilization of required health services. It is because of this importance, most countries Introduced and strengthen health education services within their health care system.

Community health in the 1<sup>st</sup> All African Conference on Health Care is the essential health care based on scientifically sound and socially acceptable method or technology made universally, accessible to individual and families in the community through their full participation.

The full participation should be there to promote “We” feelings. By proper Involvement of the people in the community, the development of the programme after the initiators might have left.

Community health meets the essential needs of the people living in the community and in harmony with their custom, tradition and other social values.

Community health is the first stage in the uninterrupted process of health and social protection. It is integrated into communities and other social and economic development sectors. It thereby contributes to the consistent achievement of social and economic objectives. It is based on the use of local resources and an appropriate training of workers from the community. It involves making use of appropriate technology and other positive elements within the traditional health system.

### **5.3 Components of Community Health**

1. Health education
2. Promotion of food supply and proper nutrition.
3. An adequate supply of safe water and basic sanitation.
4. Maternal and child health care including family planning
5. Immunization against the major infectious diseases e.g. Measles.
6. The provision of essential drugs.
7. Prevention and control of local endemic diseases.
8. Appropriate treatment of common diseases and injuries.

To enable each individual, family or community to take full responsibilities for his own health, the government and other structures for delivering health and other social care have the imperative duty to circulate relevant information on health issues.

### **5.4 Mental and Emotional Health**

Everybody desires vibrant mental and emotional health that will contribute to achievement, attractive personality and happiness.

Mental and emotional health is an aspect of total health. Total health is a combination of both physical, social and mental health. Health could be seen as a quality, resulting from the total functioning of the individual in her environment that empowers him to achieve a personally satisfied and socially useful life. Health is that state, which enables an individual to face up to crisis, carries out his daily responsibilities efficiently and relate to other people effectively.

The body is made up of many parts all of which function together as a unit. The functioning of individual as an integrated unit implies that whatever affects any part of the individuals make up, also affects other parts thereby causing slightly or grossly impaired function of the body. An individual is regarded being in health if everything inside him is functioning to an extent that he is able to function well; physiologically intellectually and socially.

Health of an individual is as a result of his total functioning within her environment. How effective an individual's level of living is, determines his quality of life. Effective living is a resultant of an individual's functioning in a variety of life activities including physical, social and mental tasks. An individual's work, leisure activity, food habits, interactions with others, successes and failures, all combined to determine his quality of life and how effectively he lives his life.

Health is not restricted only to an individual; it also involves the home and the larger community to which an individual belongs. Therefore, an individual needs to be concerned about health of his society. There is need to continuously educate people on how to improve their health through a well-planned and executed health education programme. Health education should contain and present health information in ways that would motivate individuals to use such information for their personal benefit and that of the community.

Mental health covers such attributes as happiness, getting along with other persons, pleasant personality or a good disposition. Mental health includes both emotional stability and maturity of character and also the strength to withstand stress inherent in living in the society without undue psychological discomfort.

There is no universally agreed definition of mental health but all definitions agree that mental health is a quality of health resulting from the satisfaction of one's needs through personal and

social adaptations to one's environment. In making such personal and social adaptations one attempts to develop to the fullest extent his own unique personality through socially considerate behaviour. An individual's behaviour shows such an individual's ability to:

- Face problems confronting him realistically
- Make choices from several alternatives intelligently
- Cope with one's emotions maturely and skilfully
- Work efficiently and live effectively
- Find satisfaction, success and happiness in carrying out one's own role.

An individual does not have all the traits of a healthy mental state all the time. The status of mental health of an individual is continually changing depending on his actions and the type and intensity of the forces acting upon such individual. An individual may have a bad day or may be depressed in spirit in a particular situation. There is possibility that an individual has a higher degree of mental health than the other individual who is equally considered normal.

Mental health should not be seen as a concern to only people who have serious mental illness; rather the fears, anxieties, frustrations and problems that confront individuals on daily basis determine mental and emotional health of individuals. Mental health problems in individuals can be assessed through such questions:

Is there any feeling of tiredness? Do you feel ill frequently? Are you bored with your work? Is there any feeling of losing touch with your environment? Do you sleep poorly? Are you worried about your studies? Are you having some troubles/misunderstanding with your lecturer or your boss? Are you getting along badly with your spouse/friend/son/daughter? Are you having financial problem? Have you just lost a close relation! friend? Is there any illness or disability you are faced with? Is there any feeling of uneasy without fears and :anxieties, a 'yes' answer to one Or more of these questions sometimes would be common. When mental problems are of short duration, they do not constitute serious problems but when they become protracted or chronic they culminate into serious mental lime Within the society, mental health status of individual Is constantly assessed mainly by observation behaviours displayed by individuals and judging such behaviour with what is considered normal or abnorr behaviours. It is commonly found that a behaviour labelled sick behaviour once such behaviour is perceive as strange,

peculiar or abnormal by one's peer group. However, it is possible to consider an individual to mentally sick when such individual is not, but been those around the individual view his behaviour as r conforming to accepted social norms. It should be born in mind that some judgments about mental status, the society are based on arbitrary and often unstable criteria.

## **5.5 Emotional Maturity/Development**

Emotional maturity contributes to the fulfillment coping with human basic needs. Maturity is all about behaviour and it manifests in both action and attitude. It involves one's relationship with self and others. Some persons do not act at a level of maturity expected c them and since they lack the characteristics o emotionally matured persons. Emotional maturity can still be developed in adults even though it takes place during childhood. In other to develop emotion maturity, the following steps as proposed by Jones associates have long been adopted.

**Draw others out In conversation:-** Through this, person is believed to be exposed to many new ideal and attitudes and it enhances emotional development.

**Accept the Difference in Others:-** It is not enough to tolerate people's actions and attitudes as this may amount to patronage, rather, there should be an awareness of difference in other persons. The acceptance of these differences are important to emotional maturity.

**Learn not to feel that you must establish a rightness or wrongness about everything:.** An adoption of this kind of attitude is important to emotional maturity: because the fact is that most belief and attitudes are just different and not necessarily superior/inferior to one another. However, One can still have a personal standard.

**Do not hesitate to expose your feelings as you expose your intellectual ideas:-** One can probably learn more about self through self-exposure to reliable others. Exposure of true feelings encourage others to reveal their own feelings too.

## **School Health**

School can be referred to as a place where all the teaching and learning take place; it is also a place where transmission of knowledge or culture is taught in an elaborately organized System.

School health however is a process with intellectual psychological and social dimensions relating to activities of people to make informed decisions affecting their personal, family and community well — being which is the relation between knowledge and health.

In most societies, schools are the most widely available institutions for learning. School “catch” people when they are young exerting a considerable influence on the children in a society. The formal school system can be particularly powerful vehicle for promoting health.

The formal education system has the potential to influence the health of not only students and teachers but also the community as well. If this potential is to be realized, schools and what happens within them must be the target of educational change.

It is clear that school health education wishes to influence favourably the lives of people to affect their ways of thinking and doing things to improve their lives over what it was in the past. It seeks constantly and continuously to show better way of living, of building a heritage, of preventing sickness or of preserving the home. Programmes of school health education are to be found firmly in the centre of this intent. It is an integral part of the entire educational structure, but concerned primarily the vital dimensions of human value.

In other words, one needs abundant health to pursue successfully the goals of education and one needs education in order to acquire the knowledge that will favourably influence his attitude, beliefs and actions in matters of personal, family and community health.

In man’s quest for health, the school has been in a strategic position. The school’s role has become increasingly important, as man has understood the nature of health and the measures that must be taken to achieve it. Recognition of the school as an important agency for the promotion of health has increased as health promotion for the individual human being has been increasingly emphasized. The extent to which the School health movements has grown out of advances in health science health application and health advancement is as interesting as it is important.

### **Component of School Health**

- Personal and community responsibility for health
- Maternity health

- Sanitation.
- Fumigation
- Control of Communicable diseases.
- Disposal of Wastes
- Protection of water supplies
- Protection of Food

### **School – Child Health**

School — Child represents another obvious but often- neglected group that is capable of having a profound effect on the health of the community. A collaborate relationship between the health and educational system is desirable. The introduction of health topics into the School curriculum, the inclusion of children in health projects and the provision of special training to schoolteachers, are some examples of ways to promote health education.

It is often most effective to combine education aimed al improving health with education aimed at increasing productivity and living standards. In most developing countries education focused on young girls and women is very recording. Learning by — doing is also a successful method.

### **Characteristics of Healthy School**

Tapping education’s potential to create a supportive environment for health may require breaking down barriers to cooperation between formal and informal education and between various sectors and level a government, learning within the formal system. A complementary mix of formal and informal education provides people with the greatest opportunity to lean and grow.

A healthy school is one that does make them lean about health. Characteristics of a healthy school include the following:

- A healthy school should be clean and safe It should have good lighting
- Appropriate ventilation and heating
- It should have safety features
- There should be provision for clean water
- Proper waste disposal.



A healthy school is a positive place to be. Teachers, as well as students should have good working conditions and feel empowered and supported in their work.

A healthy school acknowledges that in order to learn, people must be healthy. it takes action when student's basic needs are being met and provides an appropriate range of health services.

A healthy school practices what it preaches. It promotes health through positive role models, provides opportunities for physical activity and makes nutritious choice available in school food outlets.

A healthy school has healthy policies and programmes on discipline, parent involvement, students initiatives and so on.

A healthy school respects the right of people to participate in decision-making. It provides opportunities for students, staff and parents to contribute to decisions affecting the school.

A healthy school involves learners in participatory learning process that is meaningful and relevant to their situation. It empowers them for future participation in society.

A healthy school provides opportunities for students to learn about healthy personal choice and to contribute to the health of their families and communities.

A healthy school is an integral part of a healthy community. In a healthy school, resources are mobilized to meet the learning needs of the community.

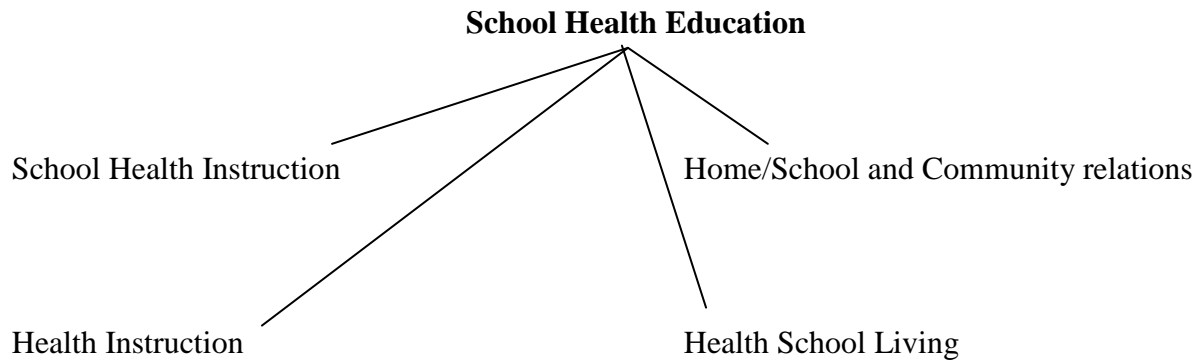
## **5.8 Objectives/Values of School Health Education**

1. It is for the correction of poor health practices.
2. It is to eliminate presence of organic and communicable diseases resulting from unhygienic behaviour condition.
3. School health helps to correct our ideas of health, which is traditionally based on divine providence.
4. To furnish basic information in health matters.

5. It helps to contribute towards the realization of educational aims.
6. It helps to fulfill the objectives of general education that is the provision of good health.
7. It develops in the child; positive health knowledge, habits and practices which he needs to solve his health problems and that of others.
8. It offers awareness for the child to realize the importance of keeping his environment clean and tidy.
9. It creates opportunities to a child for the realization of his health potentials.
10. It is a forum for helping the child develop social and emotional stability.
11. The process is educative by itself.
12. As an aspect of community health education, it establishes •avenues for forging meaningful developments of healthful practices for the child and the parents.
13. A base for further health education for the child It is a means of protecting the child from communicable diseases.
14. It helps to identify early defects of the growing child.
15. It helps to eliminate and control hazards in his environment and can treat emergency cases.
16. It helps the child to be able to face the ‘challenges ahead because of recent changes in the environment.
17. It helps the child to deal with the present day poor health practices resulting from unhygienic living conditions.

In summary, school health education is to bring about changes in what pupils know, understand, do - feel about health for the development of attitude, appreciation, knowledge, health and practices.

## 5.9 SCOPE OF SCHOOL HEALTH



**1. Health Instruction:** - This Is the instructional/teaching aspect of school health programme whereby the teachers provide health knowledge, health attitude and practices. It is the doing aspect.

**2. School Health Services:-** This involves the various health services provided in the school environment for the well being of the child and the staff. It Is aimed a assessing the child's health, protecting him from communicable disease, providing emergency care offering counseling services

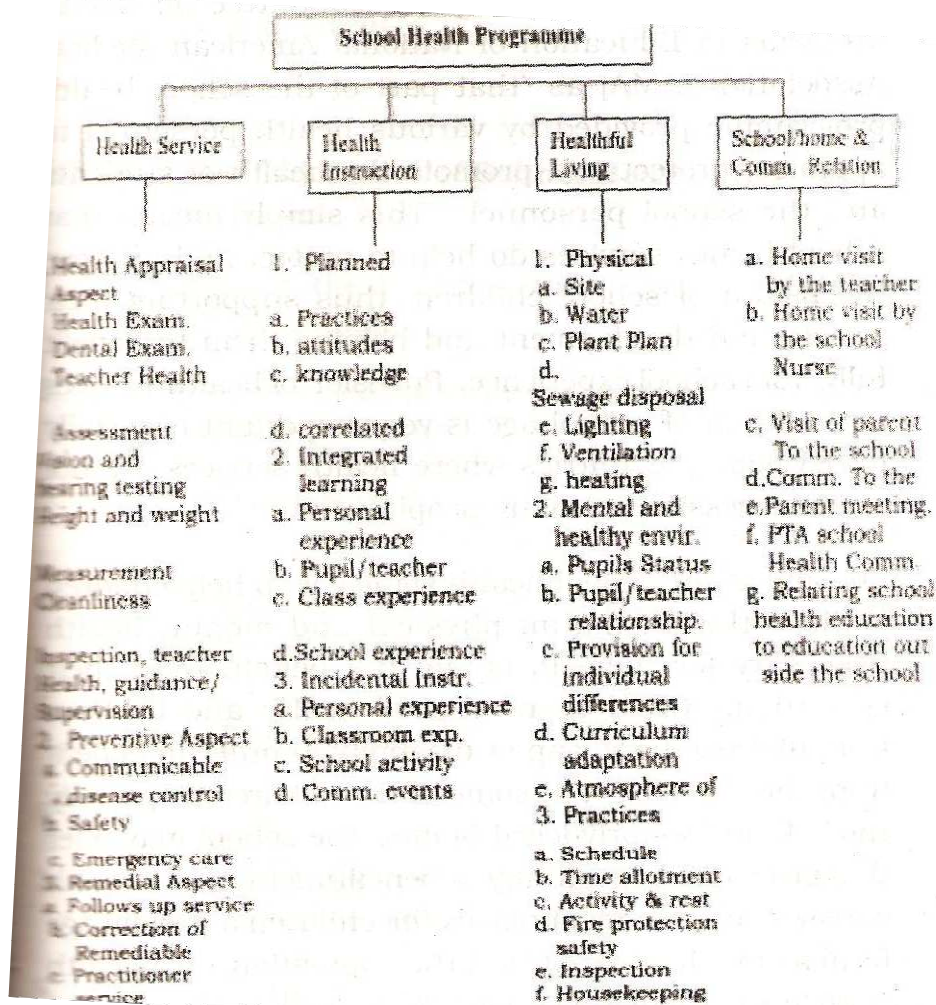
**3. Healthful School Environment:-** This involves the provision of a clean physical environment and human interaction [relationship] between the school staff and pupils. It is aimed at providing a cl surrounding in the school. Making sure that pupils study in a healthy atmosphere through a well-t school day, and teacher - pupil relationship.

**4. Home — School Community Relationship:-** This is the aspect that presents school health as an aspect of community health. It is aimed at relating school health problems, child, the parents and the school

School health programme

## 5.10 Basic Division of the Schools Health Programme

## Basic Divisions of the school Health Programme



### 5.11 School Health Services

A school health service is a component of the school health programme. The various aspects of school health services support other parts of school health programme. The objectives of school health services are just the same as for the school health programme. These include promotion and maintenance of the health of the school child and the school personnel. School Health Services has been defined by the joint committee on health problems in Education of National American Medical Association [ as “that part of the school health programme provided by various health personnel to appraise, protect and promote the health of students and the school personnel. This simply means that school health services do help to protect and improve the health of school children, thus supporting their growth and development and helping them to

benefit fully from school experience Provision of health services for children of school age is very important especially in developing countries where health services are not easily accessible to many people.

The aim of the school health service is to help children achieve the maximum physical and mental health necessary for them to obtain full benefit from their education. Children need good health and freedom from disease, handicap or disability in order to benefit from their school. For some of the children, especially those from less privileged homes, the school may offer them the only opportunity of benefiting from the health care services. In most places the children of school age form as much as 20-30% of the population, so a health service for them takes care of a good portion of the community. Exposure to communicable diseases is highest during school year when the child comes in contact for the first time with people from outside his family. During this period the child is also exposed to various physical and emotional hazards. The school child is also very easy to be moulded due to his tender age and health education given at school can be very effective and will not only reach the child but his home and even the next generation when child becomes an adult or a parent.

#### **5.11.1 The Objectives of School Health Services Include:**

1. Appraising the health status of school children and school personnel.
2. Provision of medical examination to the school children and school personnel.
3. Counselling school children, teachers and parents on health care matters for the health of the children.
4. Provision of emergency care and treatment for sudden sickness or injury.
5. Helping to prevent and control communicable and non communicable diseases.
6. Promoting optimal sanitary conditions and safe facilities
7. Assisting in the identification and the education of handicapped children.
8. Promotion of remediable defects.

Generally the objective of School Health Services is to reduce mortality and morbidity rate among school age children and help them achieve the maximum physical, mental, emotional and social health necessary for them to benefit fully from their education.

### 5.11.2 Scope of the School Health Services:

1. Health Appraisal
2. Health Counselling and Interpretation
3. Emergency care for injury
4. Communicable disease prevention and control.

**5.11.3 Health Appraisal:-** Health Appraisal is a process, which seeks to determine the total health status of a child in order to protect and improve his health. An appraisal of health is an evaluation of the current health status of an individual. Health appraisal in school is achieved through the following means;

1. Teacher Observations
2. Screening tests
3. Physical fitness tests
4. Health History
5. Medical examination

**1. Health Observation:-** The teacher has a major role in the observation of the children's physical and emotional health. An observant teacher can easily identify those children who seem to have some health problems; such children are either kept under further observation or referred to their parents or a health specialist. Teacher's observation covers a quite extensive area, which includes

- a. General Appearance:-** Too fat or too thin, too tired, too drowsy, poor posture, poor coordination, hyperactive or unresponsive.
- b. Eyes:-** Inflamed or watery eyes, squinting eye and inability to see well.
- c. Ears:-** Earaches, discharges from the ear, inability to hear discussions.

- d. **Nose and Throat:-** Persistent mouth breathing, frequent colds, nasal discharges persistent cough shortness of breath and wheezing.
- e. **Teeth and Mouth:-** Inflamed or bleeding gums, toothaches, irregular teeth, cracking of lips at corners of the mouth.
- f. **Skin and Scalp:-** Rashes on face or body, numerous pimples, frequent screeching, ring-worm, excessive dandruff.
- g. **Behaviour at play:-** Easily tired, becomes breathless following mild activity and unusual clumsiness.
- h. **General Behaviour:-** Docile, drowsy, aggressive, depressed and unhappy, nervousness and inability to concentrate.
- i. **Health Practice:-** Being unclean and unkept, poor eating habits and inability to put health knowledge into practice.
- j. **Attendance to School:-** Frequent absence due to allergies, cold, headaches, toothaches, upset stomach and feeling too tired to come to school.

**5.12 Screening Tests:-** Screening refers to the use of presumptive procedures to identify persons who apparently have disease or are sick or are at risk of some health problems. Professional health services personnel use screening tests to screen out those children in school who need diagnostic examination. The screening tests most commonly used are those which measure height and weight and determine visual and hearing acuity, these tests are not for diagnostic but to establish a basis for referral.

#### **5.12.1 Growth and Development Screening:**

Measurements of weight and height give information about growth and growth variations due to sex, age and individual growth patterns.

**5.12.2 Vision Screening Test:-** Involves observation to detect obvious eye diseases such as holding a book too far or too close to the face or closing or covering one eye when reading. Tests for visual acuity should be carried out annually through out the school years.

**5.12.3 Hearing Screening Test:-** Involves the teacher having a strong suspicion that a child has difficulty in hearing if he observes any of the following difficulty in locating the source of sound, failure to respond to his name when called and unusual dependence on visual cues. Hence, screening tests for auditory acuity should be performed routinely in schools.

**5.12.4 Physical fitness test:-** Physical fitness is the ability of the heart, blood vessels, lungs and muscles to work their best. Therefore testing for one's physical fitness is a good way to identify one's physical strengths and weakness. Physical fitness test like [ test] has six components] e.g. test for cardio respiratory Endurance, strength and muscular Endurance, flexibility, motor skills/agility and balance.

**5.12.5 Medical Examination:-** An important part of preventive medicine is a regular medical examination. A medical examination may reveal medical problems.

## **5.13 HEALTHFUL SCHOOL ENVIRONMENT**

The sanitary living conditions in school given a student a wholesome mental and emotional climate in which to spend his/her school years.

A healthful school environment is important and needful because it is a means of straightening important health learning. As a result of this need, the maintenance of healthful school environment should be obligation of the school administrations.

A school plant should be a part of the educational process and not just a shelter. The plant is the environment in which a child grows, develops and learns. Learning should not only be educational experience in itself but should permit opportunities.

### **5.13.1 The School Environment**

The school environment should be a healthful place for pupils and staff to live in. A healthful school living environment is part of the school health programme that ensures that the physical, emotional and social conditions available are such that will enhance the health and safety of pupils and staff of the school.



The school environment is best described under the following headings:

1. The physical environment•
2. Social and emotional environment

### **5.13.2 The Physical Environment**

**a. Location:-** Where is the school situated. The location of the school should be ideal and safe for the pupils. The proximity of the school to the river or express road, busy road poses great threat/danger to the pupils since

**b. Topography/school plant**

The school topography should be good, the land should be flat, not eroded, and without pot-hole. The layout of buildings must be spacious enough to be conducive for effective learning. This is to say that buildings should never be closely situated, thus hampering good ventilation. Also noise from one classroom will affect the other.

Generally, the environment must be attractive with plants and flowers around. Since an attractive environment provides a positive motivation which encourages the teaching/learning process; its absence in any school can lead to the children not to want to go to school early or even stay away completely.

Other important requirements for a school include administrative block, school library, sports field, pupils common room and health room.

The absence of the aforementioned facilities does not allow for effective day to day running of the school. The school environment needs to be made aesthetically acceptable, through planting of flowers and trees within the premises. The school too should make provision for play field for extracurricular activities.

### **c. Classroom Accommodation**

Adequate number of classrooms has been found to enhance effective learning in schools since this will reduce congestion. Classroom should be adequate for the pupil's population. The ideal classroom should be 35 pupils per class. Any crowded situation could predispose to spread of communicable diseases and hinder learning. Where class size is more than 35 pupils per class, the teacher will find it difficult to control the class, and may not carry out effective assessments. Overcrowding will cause pupils to feel easily exhausted and fall asleep during lessons. There must be adequate number of classroom furniture and should be appropriate for the age and size of the pupils. This makes for comfort of the pupils and thus enhancing learning. Adequate number of classrooms should be provided in order to reduce overcrowding. At most there should be 35 pupils.

### **d. Water Supply**

Water is important for a healthful living. Water supply is a major problem in most rural schools as pupils fetch water from various sources: the river, an unsanitary well, sanitary well, bore-hole and tap-water.

The water from the river and other unsanitary well is unsafe for health. pupils could easily contract water-borne diseases and this could take them away from school for quite a length of period. In search of safe water, pupils most times are forced out of the school premises which has its attendant hazard in relation to access. The pupils will have to cross the busy express roads before getting there; They are therefore exposed to the danger of being knocked down by moving vehicles, sprained/strained legs and lacerations due to pointed sharp objects. The ideal thing is to install water in the school compounds either tap water or bore-hole water. As a matter of priority the school should be provided with a good source of water for example, a sanitary well, bore-hole or tap-water.

### **Disposal of Human and Solid Waste**

Faeces passed around the school premises indiscriminately poses such health hazards as the spread of faeces-borne diseases especially that pupils are likely to pick things from the ground and put into their mouths. Therefore, the school must have a block of sanitary pit latrine or water

system toilets for use by the pupils and teachers to prevent pupils from defecating within the school premises.

The school should not dump refuse openly within its premises and eventually burn it. Both practices are risky to health because the environment is being polluted by smoke while refuse is burnt. This could predispose the pupils to respiratory problems. The refuse being openly dumped can spread diseases, breed rodents and even cause accidents from broken bottles and other dangerous items while playing around the premises of the school.

### **School Food Service**

Schools should approved food vendors attached to them. The food supplied must be supervised by the school committee on food or by health officials from the local government. Since nutrition is vital for mental and physical development of the pupils. Their physical and mental state will determine how well they will learn.

Hence, food services must be made available in school.

## **2. Social and Emotional Environment of the School**

When interpersonal relationship between staff and pupils is present in the school environment the teaching learning process is enhanced. This is so because good staff/pupils relationship determines the degree of individual's internal peace and adjustments to the society.

There should be a climate of friendliness among staff and pupils, especially in the way they interacted and discussed with each other. Pupils/pupil relationship should equally be cordial. This could be evident in the way pupils played together.

### **5.14 Importance of Healthy Physical School Environment**

1. It helps to motivate the activities of the teaching learning process because it makes the child learn better and teachers teach more meaningfully.
2. It improves the name of the school [ of the school and its beauty].
3. It makes the child study in an area full of fresh air and enough light.

4. It reduces the chances of sustaining accidents in the school and helps to eliminate possible injury.
5. It helps to reduce infection of water and food born diseases including diseases transmitted by inadequate provision of toilet facilities.

Still under a healthy school living is a healthy emotional environment. This is the person — to person relationship, personal feelings and pupils behaviour and their results and effect on school life and activities. Factors involved in healthy emotional environment include:-

1. staff and pupils relationship
2. Academic programme and school curriculum suitability
3. School population and size
4. Length of the school day and year
5. Recreational activities in the school
6. Home work and class assignments and
7. Beauty of the school

#### **5.15 Roles of the Teacher in a Healthy School Living**

1. Counseling - Advancing and directing both the pupils and fellow staff
2. Observation - Having close and direct observation of the pupils actions, behaviour and practices
3. Supervision -Supervising the environmental activities both the physical and emotional aspects
4. Teaching informally - Using an available opportunity to teach about physical and emotional issues happening in the school.

#### **5.16 School Health Instruction**

The school is not the sole agency that contributes the health education of a child. However, the care health instruction must come from the school. Some children have limited opportunity for

health instruction outside the school; hence, health instruction like other instructional area should be a meaningful experience of permanent value.

Health instruction makes an effort through the classroom teacher who is the key person in the organisation and implementation of elementary school health instruction to promote health understanding establishment of desirable health practices.

Various approaches to health instruction are in genera use. Each has merit and can be used to advantage when adapted to particular needs and situations.

1. Planned direct formal and informal instruction.
2. Integrated living as health instruction
3. Incidental instruction
4. Correlated health instruction

Since all four approaches have special attributes and merits, the prudent elementary school teacher utilizes all four in conducting an effective health instruction programme. Together the four approaches tend to ensure the maximum in effective health instruction.

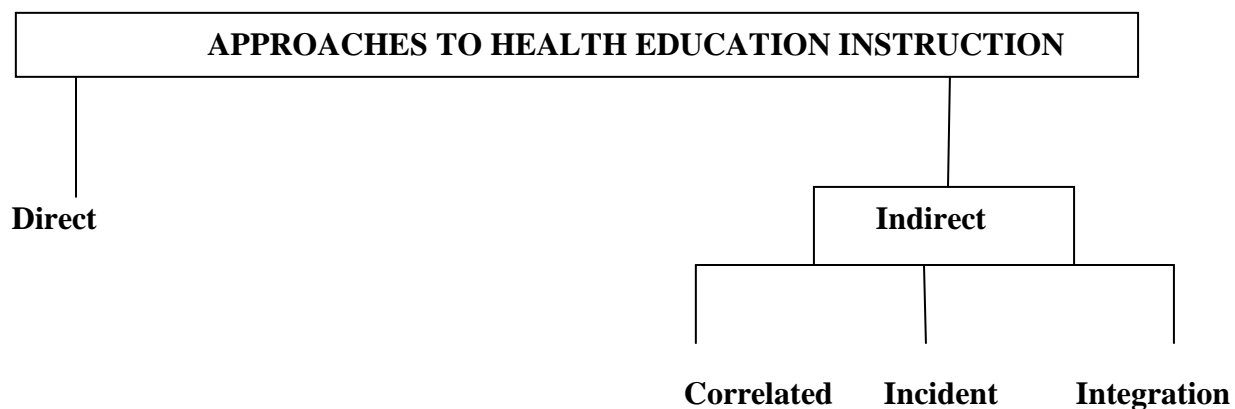
## **5. 17 Health Instruction Planning in Elementary School**

Health instruction is the organized teaching technique, plan, procedure and method used for imparting health knowledge and influencing the child's health practices and behaviour. In other words, it means the teaching and the organisation of health education content materials or the well-being of the child.

### **5.17.1 Importance of Teaching Health Education in Elementary School**

- a. To impart health knowledge for the protection and promotion of health.
- b. To inculcate positive health habits and practices in the growing child.
- c. To correct the bad ideas the child might have about health and other negative values he has built up in the areas of health.

- d. To erase in the mind of the child the effects of superstition and cultural taboos in the child's ideas of health promotion.
- e. To help the child control communicable diseases.
- f. To ensure co-ordination of the programme with the total school curriculum
- g. It increases the chances of achieving the purposes of school health programme.
- h. It helps to identify the resources needed for the programme in terms of human and material resources.
- i. It facilitates the deployment of available resources.
- J. It is economical in the sense that it gives direction and eliminates disposition or waste of energy on irrelevant issues.



**5.17..2 Directed Health Instruction:-** In direct approach, the subject; health Education appears on the time-table and specific time is allocated for the health education activities. Schedule formal lessons is the main mode of transmitting the content, and the class teacher teaches the topics as stated in the scheme of work. Factors considered in selection of what to teach under the directed approach are:

- Time factor
- The child
- The class level

- Teacher's knowledge
- Objective of education

### **5.17.3 Merits of Directed Instruction**

- Direct teaching gives a status to health as a subject area.
- It ensures at least a minimum of emphasis on teaching
- It provides an Organized approach
- It deals with realistic specific needs
- It makes effective results possible for a teacher of average ability.
- It tends to emphasize the positive aspects of health.
- It can be applied even with incidental teaching
- It can emerge from correlated teaching
- It can be channelled into integrated and other approaches.
- It provides for outcome in terms of interpretations, values and worthwhile attributes.

Generally, the imaginative teacher can use direct teaching as an adventure in health education, as effective as it is interesting.

The indirect approach of health instruction consists of all the formal modes utilized to provide health knowledge and experiences. They include:

### **5.17.4. Correlated Health Instruction or Correlation Approach:**

Correlation in which health education is incorporated with other subjects. This involves teaching health education by associating it with related school subjects e.g. it could be merged with physical education, biology, integrated science, and home economics. One can teach health facts through physical education classes in the areas of the healthful effects of exercise or cleanliness in physical activities execution. Correlation provides for the development of health units within several subject matter areas.

### **5.17.5 Incidental Approach of Health Instruction**

Incidental approach in which health education is provided when the need arises. In short, this is the teaching of health education when the opportunity offers itself. For example, if during a game period, a child sustains an arm injury, the teacher can use that opportunity to teach bone fracture. It has no given time on the time-table. It is also referred to as teachable moments.

### **5.17.6 Integration of Health Instruction**

This is similar to a core approach in which learning experiences are organized around a central theme. This plan involves teaching health facts through core factors derived from a selected related subject matter areas. The central theme may be health. Content from other subjects are selected to discuss the theme. On the other hand, the central theme may be an aspect of living and health content may be included in discussing the theme. E.g. sources of energy can form a unit of study in health education. Integration focuses on all subject matter areas upon a specific health problem. All the subject matter areas make their contributions to a given health problem and the health class co-ordinates the efforts towards the solution of the special health problem.

## **5.18 The School and Community Health**

School is located in the community hence a subset of it. The community is a complicated social setting where all the individuals live and interact with all the components therein. For example, substances, human beings, forces, resources etc, in the surrounding. Each of the activities of one man affects the health and life of, others.

None of the social setting is an island. Therefore the school and the community are not distinct and isolated entities, they are in exchange of interactions, many things are done in co-operation or group. The school benefits from the resources and agencies in the community while the community benefits from expertise and knowledge in the school.

Students/pupils are trained in schools and they go back to their communities as better citizens and contribute to community development.

The pupils at school are reflections of the parents at home and in the community. Schools help the community to identify and highlight its health problems. It serves as a resource linkage



between the community and government agencies for solutions. School helps communities to prioritize their numerous health problems and attract attention.

## **CHAPTER SIX**

### **ENVIRONMENTAL SANITATION**

#### **6.0 Introduction**

Several authors have conceptualized the term environmental sanitation according to the perspective they see it. Some conceptualized environment sanitation as the process of training the environment so that it no longer constitutes a hazard to man; while others maintained that environment is the collective term used to describe all the living and non living thing that make up man's surrounding, this includes the biological, physical, cultural, social, economical and political environment. Activities put in place to control these elements in the environment for the maintenance and emotion of man's health is otherwise known as sanitation.

The environment is the surrounding conditions, or forces that influences:

- a. The whole complex of climatic and biotic factors that act upon an organism or an ecological community and ultimately determine its form and survival; and
- b. The aggregate of social and cultural conditions [customs, law, languages, religion, economic and political organisation that influences the life of an individual or community.

In another perspective, environmental sanitation spans a really wide range of issues, the least of which is the activities affecting the health or cleanliness of the totality of the environment in which man lives and operates, keeping such environment "Free from deleterious influences. Environmental sanitation covers an imposing spectrum of responsibilities and activities. More so environmental health activities or programmes have become so complex that it must weigh balance and take action on situations involving, in varying proportion, air pollution, water pollution, surface water and ground water disposal, food and drug product protection, occupational health and safety, solid waste management, its collection, transportation, disposal and recycling.

Environmental sanitation should include among others, housing and neighbourhood planning, conservation and rehabilitation, noise pollution and prevention, radiation protection, insect and

rodent control. the broader spectrum of it is in consideration of man; his environment and their relationship in both a positive and total sense.

## **6.1 Waste Disposal**

Disposal of waste has been identified as being of utmost importance in the Sanitation of the environment. It is the first problem which must be discussed in any community because the success of any other health measures introduced will depend to a large extent upon its efficiency.

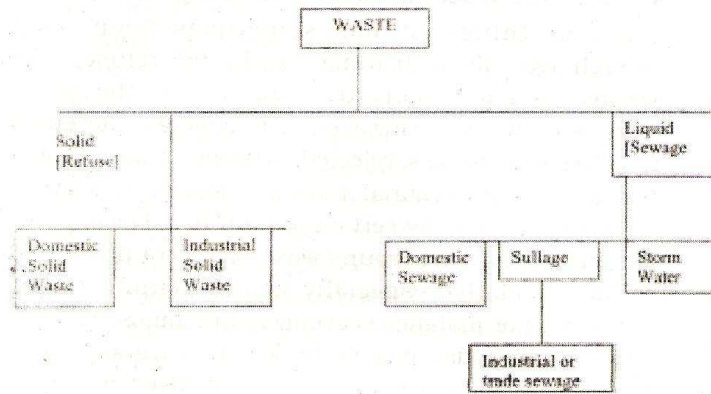
Waste has been used in different circumstances to mean different things, it has sometimes been used interchangeably with other words like refuse, or sewage. But it is more than any one of the afore mentioned words. However, it is generally accepted that Waste is useless, rejected as spoiled and no longer required for its original purpose. However, what is regarded as waste by certain ground may become raw materials to another ground waste in recent times, and could be relative especially in the manufacturing Industry. For instance scavengers are almost at every refuse dump today picking broken plastics and other discarded materials because these disused materials constitute raw materials in some other industries.

### **6.1.2 Classes of Waste**

Waste substances produced in our daily activities, which are unwanted and are no longer useful can be classified according to their:

- i. Origin or sources, for example household, industrial and recreational waste.
- ii. Chemical composition, e.g. organic toxic, inorganic and radioactive waste.
- iii. Appearance, texture or state, e.g. dry, liquid, wet or solid waste.
- iv. Location e.g. urban and rural wastes

Conventionally, wastes can be grouped into two major categories; solid waste and liquid waste.



### 6.1.3 Waste Disposal: Common Approaches to waste disposal include

#### a. The Sanitary Land Fill Method

In most Countries where there is no shortage of land with suitable geological formation, Land fill remains the predominant form of disposal. In western countries such as United Kingdom, well over 90% of municipal wastes are land filled, while it is about the same percent for Canada. It is the most common method of contemporary refuse disposal in Nigeria. It consists of tipping the refuse/municipal waste into burrow pits, quarries, mineral-excavations, valleys and area involving the reclamation of land from water.

According to the World Health Organisation, Sanitary Landfill is a method of disposing wastes on land without creating nuisance or hazards to Public Health or Safety by utilizing the principles of engineering to confine the refuse to the smallest practical volume and to cover it with a layer of earth at the conclusion of each day's operation. Well managed landfills can be successful and economical, attractive, clean, with no objectionable odour, insects, besides meeting public acceptance air health standards.

#### b. Incineration

Incinerators are installations resembling power plan and are designed to burn refuse, industrial waste hazardqus wastes and sewage under controlled nuisance — free conditions at relatively hi temperatures; to reduce the waste to inert, organic free residues which can then be disposed of in a land fill site. The main advantage of incineration over landfill is the large reduction in the

volume of material requiring final disposal. The heat energy generated t combustion may also be recovered. Incineration however represents a source of air pollution and acidic gases discharge.

## **Composting**

Crop residues, and green plants may be disposed o through composting. This is the aerobic decomposition of organic solid wastes to produce relatively stab] materials. The method usually involves the use c manually excavated pits or highly mechanized plant that have facilities for separation of useful materials s as to recycle as much of the waste materials as possible.

### **3.1.4 Scope of Sanitary Survey**

Since existing water systems were designed to meet requirements at the time of their construction, very soon the systems become strained beyond their capacity a population increases. Monitoring should in addition; to physical, chemic and biological quality include sanitary survey to deserve defects to imp rove plant performance to ensure complete safety of the supply.

Such a survey will include sanitary precautions of source, treatment processes, storage and distribution of supply.

#### **Sanitary survey of distribution system**

A critical study of the plan of the distribution system as well as those of the sewage system should proceed the survey.

A preliminary study and inspection to provide the following information should be undertaken:

1. Area and population supplied proportion in the region
2. Nature of supply {gravity or pumped, continuous intermittent] total supply and average rate of supply; operation pressures, high and low.
3. Population served by house taps and public size and location of adjoining areas.
4. Single or dual system, source, quality and scope of dual supply, cross-connection between the two.
5. Locations of recent Water lines on top of, crossing or near old water mains

6. Areas of risk for cross-connections between water mains, and sewers.
7. Extent and magnitude of leakage losses, and risks of pollution by infiltration

## **CHAPTER SEVEN**

### **COMMUNICABLE AND NON-COMMUNICABLE DISEASE**

#### **7.1 Introduction**

The word disease literally means “not at ease” More formally it is any deviation from the normal situation in mind or body. Diseases are classified into two:

Communicable diseases and non-communicable diseases Communicable diseases are illnesses due to specific infectious agents or its toxic products which arises through transmissions of that agent or its products from a reservoir to a susceptible host directly or indirectly.

The agents that cause this form of diseases are often microscopic in nature and are in five categories: [1] bacteria [2] virus [3] fungi [4] protozoa, and [5] animals parasites

The Non-communicable diseases are not caused by pathogens. Examples are cardiovascular diseases such as Hypertension, Arteriosclerosis, and Angina pectoris. Non-communicable diseases also include stroke, cancer, diabetes, arthritis and Parkinson.

#### **7.2 COMMUNICABLE DISEASES**

The table below, however identifies some communicable diseases, their characteristics, modes of transmission and prevention/treatment.

Disease	Characteristics	Method of Transmission	Prevention/ Treatment
Acquired immune Deficiency Syndrome	Viral disease of the immune system; causes fever, fatigue, loss of appetite, loss of resistance	Sexual contact transfusion of infected blood; use of non-sterilised syringes.	Screening blood donors; changing sexual behaviour
[AIDS]	to infection and swollen glands fatal.		
Athlete's foot	Fungal skin infection on the foot skin becomes red and flaky, blisters develop between toes.	Contact with contaminated objects such as shower and locker room floors	Cleaning drying feet antifungal medication
Botulism	Food poisoning caused by toxin released from bacteria; results in muscle weakness, dizziness, nausea, and paralysis of cardiac, respiratory, and central nervous systems.	Eating vegetables and fruits that were canned improperly	Toxin destroyed by heating so all foods canned or bottled should be boiled; antitoxin
Bronchitis	Viral or bacterial infection of membranes lining bronchi; causes deep cough that brings up grey or yellowish sputum, difficulty, and fever	Close contact with infected person	Bed, rest antibiotics.
Chancroid	Bacterial STD; painful chancre develops in genital area	Sexual contact	Antibiotics
Chicken	Viral skin infection, causes mild fever and itchy skin rash with blisters that form scabs.	Close contact with infected person; air borne spread of virus	Skin lotions alleviate symptoms.
Chlamydia	Bacterial STD; inflammation urethra in males and vaginal in females; symptoms similar to gonorrhoea	Sexual contact	Antibiotics
Cholera	Bacterial infection of intestine; causes severe diarrhoea, vomiting, and dehydration	Ingestion of food or water contaminated with sewage or vomit	Drinking treated water replacement of body fluids antibiotics.
Common cold	Viral infection of upper respiratory tract; causes coughing, sneezing and runny nose.	Close contact with infected person; airborne spread of virus	Bed rest liquids



Conjunctivitis	Viral or bacterial eye infection, results in tearing inflammation, itching, burning, and pus in eye	Contact with discharge from eye	Antibiotics
Diphtheria	Bacterial infection, results in sore throat, fever, and patches of greyish membrane on tonsils and throat; now most common in less developed countries	Direct contact with infected saliva or mucus	Vaccine; hospitalization; antitoxins; antibiotics
Gonorrhea	Bacterial STD; males experience painful urination, pus like discharge from penis; symptoms not as obvious in females	Sexual contact	Antibiotics
Hepatitis A [Infectious hepatitis]	Viral liver infection; causes fever fatigue, loss of appetite, abdominal pain, and jaundice; sudden onset	Person-to-person contact eating contaminated food and water	Careful attention to hygiene; isolating patient during infectious period; bed rest
Hepatitis B [Serum hepatitis]	Viral liver infection, symptoms similar to Hepatitis A, but more severe and with slower onset	Contact with contained syringes contact with infected blood, sexual contact	Same as hepatitis A
Hepatitis Non-A Non-B	Viral liver infection; symptoms similar to Hepatitis A, but milder	Contact with infected blood; sexual contact	Same as hepatitis A
Herpes Type I	Viral mouth infection, causes cold sores and fever blisters that appear most often on lips and mouth	Contact with infection saliva	Heals naturally; tropical medications may ease symptoms
Herpes	Viral infectious of the genitals; sores on genitals	Sexual contact	No drug treatment of cure
Influenza	Viral respiratory infections causes headache muscle	Person-to-person contact; contact with	Vaccine; bed rest; hot liquids

	aches, runny nose, sore throat, and coughing	contaminated articles	
Legionnaire's disease	Bacterial lung infections results in high fever, inflammation of lungs, sore high and weakness.	Contact with bacteria that grow in water, of air conditioner	Antibiotics
Malaria	Caused by a parasite that lives in the blood; causes fever, chills, sweating, headaches, and jaundice	Carried by mosquitoes, transfusion or infected blood	Prevention, medications, drug therapy.
Measles	Viral infections of skin and respiratory tract result in fever, dry cough, runny nose and rash; can lead to pneumonia and other serious complications	Contact with infected saliva or mucus; airborne spread of virus	Vaccine; bed rest
Meningitis	Viral or bacterial inflammation of the membranes around the spinal cord and brain results in fever, headaches, nausea, vomiting and a stiff neck, may cause unconsciousness.	Contact with infected saliva or mucus; airborne spread of virus	Vaccine; bed rest.
Mumps	Viral infection that spreads to many organs, causes high fever, fatigue, swollen glands and sore throat, weakness and lack of energy noticeable for weeks.	Kissing is suspected; other methods unknown	Bed, rest, treatment of fever
Mumps	Viral infection of glands, causes headaches, fever, vomiting and swelling of glands in front ears.	Direct contact with saliva or contaminated article, highly contagious	Vaccine; bed rest
Pneumonia	Viral or bacterial infection of lungs, causes inflammation of the lungs, chills, fever, chest pain, and coughing	Contact with infected saliva or mucus	Vaccine, and antibiotics for bacterial pneumonia





Polio	Viral infection of nerves. result in fever, headache, vomiting, muscular stiffness, and weakness. can cause paralysis that may lead to respiratory failure and death	Direct contact; eating contaminated foods	Vaccine; no specific treatment
Rabies (hydrophobia)	Viral infection of the brain causes convulsion, paralysis, restlessness, fever and excessive salivation fatal unless treated in time	Contact with saliva from the bite of an infected animal (dog, cat, fox, skunk, raccoon, bat, or rat).	Vaccine, see physician immediately for anti-rabies injections.
Rheumatic fever	Caused by streptococcal bacteria, results in severe sore throat (strep throat). Fever inflamed joints, and body rash, can cause permanent heart damage	Direct contact	Antibiotics
Ring-worm	Fungal skin infection, caused ring-shaped sores	Direct contact with fungus or contaminated articles	Careful laundering of clothing good personal hygiene, antifungal compound.
Rocky mountain spotted fever	Caused by tiny, bacteria like organisms, result in a high fever, severe headache, chills, body rash, and severe muscle weakness, if untreated, kidney, liver, lungs and blood can be changed	Bite of an infected tick	Tick replant antibiotics.
Rubella (German) Measles	Mild viral disease cause rash, fever, swollen glands. around ears, neck and throat, can cause birth defects if a pregnant woman contracts disease	Direct contact with saliva or mucus of infected person	Vaccine; bed rest
Salmonellosis	Bacterial food poisoning; causes acute diarrhoea, abdominal pain, vomiting	Eating contaminated food such as inadequately cooked meat, poultry and	Keeping raw meats refrigerated and



	and fever	egg productions.	cooking meat thoroughly, medication to relieve diarrhoea and vomiting.
Scarlet fever	Caused by streptococcal bacteria; results in severe sore throat (strep throat) fever, vomiting, headaches, and body rash.	Direct contact	Antibiotics
Shingles	Chicken pox virus attacks nerve roots, result in fever and scabby sores	Direct contact	Skin lotions.
Syphilis	Bacterial STD; causes open sore on genitals and body rash in early stage; more serious symptoms develop if left untreated.	Cream - filled pastries sexual contact	Antibiotics
Tetanus [lock jaw]	Bacterial infection of nerve cells in spinal cord; causes painful tightening of the muscles can be fatal	Bacteria enter the body through wounds	Vaccine; antibiotic
Typhoid fever	Food poisoning caused by parasitic worms; cause diarrhoea, fever and profuse sweating	Ingestion infected pork or game	Cooking pork thoroughly, bed rest, medication.
Tuberculosis (TB)	Bacterial lung infection; causes coughing, weight loss, blood in phlegm, afternoon fevers, and heavy perspiration at night	Contact with saliva or mucus of infected person, ingestion of unpasteurized dairy produced from an infected cow.	antibiotics
Typhoid fever	Severe form of salmonella; causes fever, headache, weakness, loss of appetite, skin rash, and constipation or diarrhoea	Ingestion of contaminated food and water.	Antibiotics
Vaginitis	Yeast or protist infection of vagina; causes vaginal inflammation, sore discharge, and itching	Yeast infection may develop with hormonal change or after use of antibiotics; protists can be spread by sexual contact.	Antifungal cream; medication





Whooping cough	Bacterial respiratory infection results in loss of appetite, mild fever, lethargy, hacking cough followed later by violent coughing episodes and vomiting	Contact with saliva of or mucus of infected person	Vaccine; antibiotics
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#### NON-COMMUNICABLE DISEASE

Disease	Characteristics	Treatment
Acne	Over production of sebum causes black heads and pimples over face, upper chest and back.	Cleansing skin; medication for severe cases.
Alzheimer's	Progressive dementia that may occur disease before age; brain cells gradually die; causes impaired language and motor functions and loss of memory and thinking ability.	None; research under way to find effective treatment.
Anaemia	Disorder in which there are too few red blood cells or not enough haemoglobin; not enough oxygen reaches tissues; causes weakness.	Depending on cause, iron supplements, vitamin injections, or transfusions.
Anorexia nervosa	Psychological condition causing progressive weight loss; refusal to eat cause dry skin, brittle hair, dehydration, fainting, and irregular heart beat.	Counselling to change attitude toward eating and to resolve underlying conflicts.
Appendicitis	Infection of appendix causes severe pain in abdomen, vomiting, constipation, and fever.	Surgical removal of appendix.
Arteriosclerosis	Hardening of arteries; may cause legs to ache during physical activity, dizziness, and temporary loss of sight; may lead to stroke, heart disease, or senile dementia.	Diet control; medication.
Atherosclerosis	Build-up of fatty materials such as cholesterol on walls; reduces blood flow; can lead to heart attack or stroke.	Diet control; regular physical activity; cutting smoking.
Bulimia	Eating disorder in which episodes of	Counselling to stop the



	extreme overeating are followed by self-induced vomiting or use of diuretics and laxatives	binge-purge cycle regain control over behaviour
Cancer	Group of diseases characterized by uncontrolled growth of cells; caused by carcinogens; symptoms vary with type of cancer	Surgery radiation th chemotherapy; immunotherapy.
Cerebral palsy	Disorder resulting from brain damage at or before birth; results in loss of muscle control, poor coordination, and speech and hearing problems	Exercise, supple devices
Coronary heart disease [coronary artery disease]	Reduced flow of blood to wall of heart due to atherosclerosis; causes chest pains and possible heart attack	Diet control; re physical activity smoking
Cystic fibrosis	Heredity disease that affects mucus secreting glands; cause coughing, poor digestion, diarrhoea, increased susceptibility to respiratory infections.	Respiratory the antibiotics.
Diabetes mellitus insulin dependent [type I]	Heredity condition in which the pancreas does not produce enough insulin, resulting in high blood sugar, causes frequent urination accompanied by thirst, fatigue, and rapid weight loss; if left untreated, can cause blindness, kidney failure, and death; onset usually occurs in childhood or adolescence	Insulin injection diet
Diabetes mellitus non-insulin dependent [type II]	Condition in which the cells cannot take in glucose, resulting in highly blood sugar causes frequent urination, thirst, fatigue, blurred vision, and frequent infections, onset most common among overweight adults	Special diet, exerci medication
Emphysema	Condition of weakened lung tissue; lung lose elasticity, resulting difficulty in exhaling, usually related to smoking or air pollution.	No cure, medicine hormones, air pump, as surgery help relie symptoms.
Epilepsy	Disorder of nerve cells in brain; seizures occur when cells release a	No cure. medicine medication



# CHAPTER EIGHT

	sudden burst of electric energy	
Glaucoma	Build-up of fluid pressure within the eye, causing the eye to become rigid; causes loss of peripheral vision and may lead to blindness if left untreated.	Medication; surgery
Gout	Inflammation of joints due to build-up of uric acid, causes severe pain in elbow, knee, hand, or foot, fever and inflamed skin; can lead to kidney disease and death if left untreated	Physical therapy; spinal brace
Haemophilia	Hereditary disease in which blood lacks factors necessary for clotting, bleeding cannot be stopped.	Avoiding risk of injury; injections of a clotting factor
Hernia	Bulge of tissue pushing through muscle wall; a rupture; often intestine through abdominal wall	Surgery
Hodgkin's diseases	Cancer of the lymph nodes; occurs most often in young adults; produces enlarged lymph nodes, fever, weight loss, fatigue, and sweating.	Radiation therapy; chemotherapy
Hypertension	High blood pressure caused by narrowing of blood vessels of symptoms until blood pressure gets dangerously high; can lead to stroke or heart disease	Medication to control pressure, special diet
Leukaemia	Cancer of the bone marrow, in which immature white blood cells multiply rapidly and crowd out mature white cells; immune system weakens; occurs most often in children	Chemotherapy
Migraine	Severe headache accompanied by nausea and sensitivity to light	No cure; medication; avoiding certain food or stressful situations.
Multiple sclerosis	Disease that slowly destroys nerve tissue usually starts during childhood; causes paralysis and death	No cure; physical therapy
Muscular dystrophy	Progressive weakening of muscles, usually starting during early	No cure; physical

## **CHAPTER EIGHT**

### **COMMON UNHEALTHY HABITS**

#### **8.1 INTRODUCTION**

Hazardous life styles can be described as risky or dangerous health habits, very often, individuals expose themselves to various diseases and injuries that could be avoided due to unhealthy and hazardous life styles, examples of such life styles are: smoking, abuse of alcohol, abuse of drugs, prostitution etc.

The types of unhealthy health habits rampant in the world include: smoking, abuse of alcohol, drug abuse, promiscuity and violence. Scientific evidence has shown that regular cigarette smoking is not just a psychological habit but a classic case of physical dependence [ to nicotine. Alcohol is classified as a central nervous system depressant, alcohol initially acts as a stimulant thereby encouraging sociability and friendliness. Psychoactive drugs have the potency to act on the central nervous system [ as a depressant, a stimulant and psychedelic. These chemicals may induce depersonalization, changes in body awareness and sensory distortion. Specific behaviour altering chemicals includes: tobacco, alcohol and drugs.

#### **8.2 Smoking**

Despite the well known dangers of smoking people still continue to indulge in the habit everyday. Smoking has become a major health problem of all. The crumbled tobacco is used in pipes, cigars and cigarettes which are smoked.

Tobacco is a substance made from the leaves of species of plant that contains a poisonous element called “nicotine”. The amount of nicotine present in two or three sticks of cigarette is capable of causing serious health problems if it were absorbed rapidly into the blood stream.

##### **8.2.1 Factors Responsible for Smoking**

Certain psychological and social forces combine with physiological addiction have been identified as major reasons why people smoke. These include:

- Group pressure or influence
- Status symbol
- Adult modelling
- Establishing habit pattern

In addition to these are parental influences, social pathologies such as unemployment, emotional depression

### **8.2.2. Effects of Smoking**

The effects of smoking vary and can be classify under the following:

- Psychological effects
- Physiological effects
- Economic effects
- Social effects

**Psychological Effects:-** Regular cigarette smoking produces psychological addiction due to the presence of the substance known as nicotine. In no time after the commencement of cigarette smoking, one becomes completely dependent on it that he may not resist the psychological pressure to smoke, as he thinks he remains incomplete without smoking.

**Physiological Effects:-** Smoking may cut down one's ability in sports. This becomes obvious, if portions of the respiratory tract are incapacitated it will effect the smoker's breathing mechanism, activities requiring endurance and stamina.

A heavy smoker suffer from lowered sperm motility, lower testosterone production, increased incidence of impotence and a greater likelihood that their rate of sexual activities would decline as a result of loss of sexual vigour, Reports of studies have shown that maternal smoker during pregnancy is a major risk factors in pregnancy. It directly retards the rate of foetal growth, and increases the risk of spontaneous abortions, foetal death and neonatal death.

**Economic Effect:-** Many people and families have been rendered homeless because of the fire accidents caused by smoking habit. Smoking also can lead to motor accident and fire disasters.

Smoking have been observed as one of the greatest cause of fire resulting in buriiis of the body, clothing, rugs, 1 etc, often fatal especially to those who smoke I-i bed or who smoke when they are under the influence Of alcohol. Also, the inevitable health problems associated with smoking definitely increase cost of medicine and health insurance for smokers.

**Social Effects:-** Parents, older siblings, teachers, Professionals and other well placed persons who smoke, 5 on unhealthy example for children and young people, thereby increasing the likelihood that they too will begin t smoke.

Non - smoker both males and females feel ill or uneasy to associate with a smoker especially when sitting in a car, aircraft or at any gatherings. Chronic smokers have their fingers and lips turned dark brown thereby disfiguring the smoker and causing him or her social stigma. Smoking also causes mouth odour, dental decay thus ‘ to social disgrace when one laughs.

### **8.2.3 Alcoholism**

Alcohol is an intoxicating element found in wine, gin. beer, Kolanut and other substances, the use of alcohol can easily become a habit which is difficult to break.

Excessive indulgence in alcohol has become harmful to the physical and mental health of the individual as well as the interpersonal relationship and his socio-economic’ functioning. It is a progressive and often fatal disease characterized by uncontrollable drinking.

Alcoholism is a disorder that presets in different forms. Its major classification include habitual excessive drinkers, habitual symptomatic excessive drinkers and periodic excessive drinkers.

### **8.2.4 Factors Responsible for Alcoholism**

Many people become prone to alcoholism as a result of interaction of many factors. Such factors include peer group, pressure, adult modelling, availability, cost of alcohol, parental influences, and as a means of escape.



Many young people take up dunking because they are seeking acceptance from their peers, such people think.. that the best way of gaining acceptance is by imitating friends, parents and public figures.

In fact, many frequent form of abuse of alcohol take place during wedding ceremonies, naming ceremonies, funeral ceremonies, church ceremonies, cultural rites and gathering of colleagues alter work.

Alcoholism sometimes runs In families but there is no evidence that the tendency Is actually inherited. Availability of alcoholic drinks is another factor that motivates people to drink.

### **8.3 Effects of Alcoholism**

Excessive consumption of alcoholic beverages may lead to the following physical consequences: diminished appetite, nausea, vomiting, cardio vascular — collapse, chronic gastritis, renal failure, cardiac failure, liver cirrhosis, hypertension, chronic emphysema, and chronic myopathy.

Psychological, alcohol encourages different effects on behaviour, producing a condition known as state dependency. ‘Socially, the of an alcoholic may lead to family violence. The alcoholic may endanger himself, children, wife or member of the community where he resides. :

Most of the traffic accidents have been attributed to over speeding and recklessness of drivers following alcoholism. Excessive drinking of alcoholic beverage are important factors leading to motor accidents. The danger of driving a vehicle after abuse of alcohol is very great etc. Unwise and excessive use of alcohol is a hazardous life-style that should be changed for good health and well being.

#### **8.3.1 Drug Abuse**

Drug abuse may be defined as the excessive or persistent taking of a drug to’ the extent that it causes physical damages to the user, impairment of the user’s ability to function in social situations or on the job or behavior that is harmful to others.

Drug abuse is not a new phenomenon in this contemporary world. Drug is a chemical substance capable of altering the physical and psychological functions of the body. There are certain conditions under which a drug is said to be abused, such conditions include:

- If drug are obtained Illegally:
- If drug legally obtained are misused.
- If drug are self-administered rather than being administered under medical supervision.
- One takes drugs above the stipulation dose.
- Many drugs which are abused alter sensory perception and their effects are often unpredictable.

### **8.3.2 Effects of Drug Abuse**

Drug may cause the user to loose completely his ability of normal perception leading to twisted logic and insanity.

Physical consequence include: damage to important organs like brain, liver, pancreas, stomach, lungs, heart and kidney. Hypertension, Nose bleeding and chronic cough may result. Psychologically, abuse of drugs can lead to anxiety, depression, dementia, fatigue, insomnia and hallucination.

High incidence of child delinquency is attributed to drug abuse. Consequently, indiscipline among youths, rioting, kidnapping, armed robbery, and subsequent destruction of life and property are becoming rampant because of drug abuse.

Nearly all drugs misused and abused cause psychological dependence on physical dependence or addiction and habituation. Considering the numerous health hazards discussed so far, it is obvious that the abuse and misuse of drugs is not only illegal; but also potential danger to the health and well-being of the individual.

### **8.3.3 Prevention and Control of Unhealthy Health Habits**

Considering the inherent numerous health hazards of smoking, alcoholism, drug abuse and prostitution, the following preventive and control measures will be helpful.



#### **8.3.4. Health Education**

There is need to educate people or masses on the dangers and risks of unhealthy habits. For the smokers, health education becomes necessary as it is not all the items offered to consuming public that are beneficial to health. Guidance and Counselling programmes should be developed to help people who volunteer or seek for advice on how to manage their smoking problems.

Drugs education for adults needs to concentrate on drug information, counselling and effective communication strategies for teenagers and youths. Teachers, group leaders and religious leaders need education as ef1 live means of imparting accurate Information to their subjects. Communication provide basis for understanding and discussion.

Attempt Should be made to educate the alcoholics and other members of the public on the danger of excessive alcohol consumption Secondary and tertiary institution students should be drug educated through resource persons, organizing symposia. conference, workshops an through religious organization activities,.

#### **8.3.5 Prevention of Smoking**

There is need to educate the actual and potential smokers as well as the masses on the dangers and risks in smoking. Anti-smoking messages should have as much time on radio and television as cigarette advertising.

Cigarette adverts could be banned. Guidance and counselling programmes and activities geared towards attending to people who volunteer or seek for advice on how to manage their smoking problems. Such counselling concepts include: exercise like, deep breathing exercise and long walks in the open air and other physical fitness activities that will improve their sense of well being a well as keep them fit.

Furthermore, gradual withdrawal process has been found to be effective in breaking smoking habit by smokers who genuinely intend stopping smoking.

### **8.3.6 Prevention of Drug Abuse**

Prevention is the best possible way of handling the problem of drug abuse. Such preventive modes include: selecting friends and activities, that will not expose one to use the drugs. Of drug free peers may remove the peer pressure of drug abuse promotion of positive mental health and proper guidance and counselling.

Drug education for adults need to concentrate on drug information, counselling and effective communication strategies for teenager and youths.

Teachers, group leaders religious leaders need education on effective means of imparting accurate information to their subjects. Communication would provide basis for understanding and discussion. Nigerian government should enact a law on age limits for drug purchase and types of drugs to be sold in the country.

### **8.3.6 Prevention of Alcohol**

Measures for controlling alcoholism include: gradual withdrawal, alcohol education and rehabilitation. Those wishing to stop drinking should attempt the following:

- Take time off from drinking
- Cut down participation in occasion for drinking like night clubs, and other social gatherings,

## **CHAPTER NINE**

### **SAFETY EDUCATION**

#### **9.1 INTRODUCTION**

Safety is a condition of being free from danger or harm. It implies a state of relative security from accidental injury or death due to measures designed to guide against accidents. Safety education, however, is a planned programme to provide knowledge, skills attitudes and certain practical measures that enable individuals to live safely and avoid accidents, it is an education for safe - living.

**The main goals of Safety Education includes:**

1. The development of appropriate attitudes and awareness of situations that have the potentialities for accident.
2. The acquisition of knowledge and skills for dealing with emergencies resulting from accidents or knowing where to obtain help.
3. The development of positive safety habits. The prevention of preventable accidents
5. The eradication of hazards in our environment
6. The recognition of the relationship between safety, success and happiness.

Based on these goals, the principles of safety education include that:

- a. almost all accidents could be avoided
- b. emphasis must be placed on higher standard of safety i.e. understand the purpose and realize that it is intended for welfare and protection
- c. accept greater responsibility for acts and better environmental control
- d. to be saved required an adjustment to the situation not merely functioning behaviour

- e. safety is related to physical and mental health
- f. accident prevention is not the task for a few people but the responsibility of many.

## **9.2 Safety at Home**

Safe living is an important aspect of living comfortably at home. This concept should be the concern of everybody because of the different factors that could constitute hazards in different homes.

Safety at home is relatively new because of the relative newness of various machines and gadgets being introduced to various home due to the advancement in technology.

The home is no more secure because of the various accidents that occur every time due to carelessness and other personal factors.

It is therefore imperative to promote home safety among people at home and inculcate in them the principles of safe living. Such home safety education programme must include publicity through:

1. Newspapers, T.V. Radio etc
2. Parents
3. Religious bodies
4. Safety organisations
5. Fraternal organisation

## **Safety in the School**

It is observed that the average Nigerian child today spends a good part of his day in school, and this routine is carried out five days a week and for nearly 36 weeks of the year. Since children are required by law to attend schools in Nigeria, it is incumbent upon the government and the community to safeguard the students from various accidents in the school.

The accidents in schools are caused by personal factors and mechanical factors. The school has a responsibility to promote safety and wellbeing of pupils while in the school premises or environment which include the school building, laboratory and playground.

The following should be considered as guides in terms of safety school:

1. Adequate classroom
2. Avoidance of over crowding
3. Adequate and proper lighting
4. Measures to prevent or minimize noise.
5. Effective ventilation
6. Suitable and attractive furniture
7. Adequate supply of safe and drinking water
8. Sufficient toilet faculties.
9. Accident free and clean play fields
10. Physical structure of the school which must be built on well drained ground and well protected.
11. School building should be spacious
12. Laboratory equipments should be properly checked always.
13. Laboratory should be safe for the students.
14. Recreational equipment should be well arranged with proper instruction on how to use them.
15. There should be adequate supervision by the teachers.
16. Apparatus to be used should be safe.
17. Experiences for safety education could be provided in the schools programme by the various units in the schools.

## **9.4 Safety on Road**

There have been a lot of disastrous loss through road accident, both in human as well as in material terms. Most safety problems of the society are man-made. The motor vehicle is an invention of the human mind and any problem that accompany its utilization must therefore be subject to control set also by the human mind.

There are many specific avoidable causes of road accidents which include pedestrians, drivers, vehicles, the condition of the road, illiteracy and violation of traffic laws.

Road accidents can be reduced by creating awareness on the following;

- . Public awareness about drivers education.
- . Existence of Federal Road Safety Corps and their efforts in reducing road traffic accident.
- . Promotion and financing program by public agencies to cut down road accidents e.g. road safety campaigns.
  - Driving test for the issuance of drivers licence made more vigorous.
  - Highways should be made wider.
  - More road signs that are clearly boldly written should be installed in strategic places.
  - Intensified enforcement of traffic regulations the road safety courts and more severe punishment for law breakers.

## **9.5 Safety in Sport**

Due to the increase in participation in athletics and sporting activities, there is need for attention to provision for the safety of those who engage in these activities. Injuries on the sports field are not only related to actual participation in the activities but also to such things as the equipment provided and the surfacing of athletic and play fields.

Sport participation results in many accidents and injuries related to the type of sport being engaged in. These injuries include skin abrasions, blister, contusions, strain and sprain, fractures

ligament damage, cartilage tear, dislocation and concussion.

These accidents are caused by:

1. Carelessness
2. Lack of thorough supervision
3. Athletes not well informed about the equipment and facilities used.

Given the large number of participants and sports related accident the following safety procedures should be adopted.

1. Provision of policy statement that will enforce safety regulations.
2. Appointment of individual responsible for safety programme of the organisation.
3. Proper accident reporting system which is essential to a safety programme is essential.
4. There should be provision of school safety handbook which must contain specific guidelines for maintaining a safe environment, identify individual responsibilities and call attention to safe work practices.
5. Safety committee could be established to gain support for sound safety practices.
6. Students should develop attitude, knowledge and skills in wearing protective equipment in each sport.
7. Students should be able to identify and recognize inadequate space and facilities, overcrowding and danger such as broken concrete, holes and slippery playground.
8. Physical education curriculum should provide the opportunities for learners to acquire skills, habits and knowledge essential for effective safe living.
9. Safe behaviour should be displayed while taking part in sporting activities
10. Major etiological factor of accident in the field of play and the prevention should be understood.
11. There should be good body conditioning of players

12. There should be adequate and careful supervision and instruction and rules and regulations clearly planned.
13. Equipment and facilities should be examined daily for irregularities and hazard.
14. Facilities and equipment need to be protected.

## **9.6 Water Safety**

Drowning is caused by suffocation in water. In nearly every case of drowning certain factors can be thought of which if they had been properly considered would have been prevented. Death does not occur following sinking in water since the heart continues to beat for several minutes before it stops. Immediately a person is rescued breathing or respiration should be restored.

Best swimmers in the world are required to follow safety rules to avoid drowning in water. These safety rules include:

1. Learn how to swim well
2. Select a place for swimming where the depth and current of the water are known and where there are no weeds that may trap you
3. Swim where life guards are present
4. Never swim alone
5. Know how long you are able to swim and stop before becoming over-tired.
6. Know how well you can swim and do not take chances.
7. Do not swim out a drowning person unless you have had special training in life saving.
8. Learn how to handle a boat or a canoe correctly or was life jackets in the process.
9. Use boats that are in good condition and do not overload them.



## **9.7 Fire Safety**

Fire which had been one of our friends since it is used in cooking most of our food has consistently been one of our deadliest enemies. Fire outbreak should be prevented since if the measure is inadequate it could result in loss of life and valuable

Everybody should always ensure that people around know how dangerous fire is to them, their job, properties and company if safety precaution that could result in fire is neglected. Adequate precautions to prevent fire and adequate instruction to fight fire should be made known to everybody.

Most fire are caused accidentally but these accidents would and could not start if the three elements [fuel, heat and air] that are necessary to produce fire are prevented. Other causes of fire are electrical defect, friction, open flame, smoking, spontaneous.

In fire safety every second is critical and the following precautions should be taken

1. Identify all likely fire sources
2. Establish the precautions and equipment to prevent and fight these identified sources.
3. Publicize and teach these precautions to ensure each man knows his responsibilities or prevention and his role in fire fighting.
4. Enforce all precautions rigorously.

## **9.8 Industrial Accidents**

These are accidents that occur in industries such as mining, construction, farming, manufacturing and other industries.

These accidents do not readily get into news because they are few:

Industrial accidents that may occur in the factory may lead to instant death, permanent handicap to body parts or complete incapacitation or injuries that may require hospitalization for months or even for years.

### **9.8.1 Causes of Industrial Accident**

1. Improper handling of objects.
2. Carelessness with a piece of machinery or hand tools.
3. Fatigue
4. Disobedience of safety rules
5. Ignorance or inadequate knowledge
6. Lack of necessary skill to handle machine.
7. Social maladjustment.
8. Emotional upset
9. Faulty machines or gadget.
10. Exposure to toxic substances or radiation.
11. Unsafe environment
12. Improper attitudes and habits

### **9.8.2 Prevention of Industrial Accident**

1. Objects should be properly handled,
2. Workers must be careful with the use of tools
3. Assign tasks according to competence and physical capability.
4. Provision of special aids to individuals with physical limitations.
5. Regular maintenance and repair of machines.
6. Development of skills for operating tools and equipment

7. Safety rules must be obeyed and adhere to.
8. Safety Education to develop positive habits and attitudes
9. Avoid using any machine when tired.
10. Make the environment safe

### **9.8.3 Medical Accidents**

These are accidents that occur in the hospitals and other related areas such as the Pharmacy, Theatre, Injection Room etc.

### **9.8.4 Causes of Medical Accident**

1. Carelessness
2. Impatience
3. Expired drugs and materials
4. Lack of necessary skills
5. Improper handling of Instruments
6. Unsafe Environment
7. Untrained personnel [

### **9.8.5 Prevention of Medical Accidents**

1. Care must be taken since it deals with human life.
2. Application of patience by the patient and the medical personnel.
- 3 Expired drugs should be discarded
4. Expired materials should be avoided.

- 5 Instruments should be handled by trained personnel
6. Assignment should be according to the skills of the medical personnel.
7. The use of untrained personnel should be discouraged.
8. Environment should be safe.

## **CHAPTER TEN**

### **FIRST AID**

#### **10.1 What Is First Aid**

First aid is practical and immediate treatment of an injury or sudden illness. First aid is administered until Professional medical care is available, such emergency care provides self-help in care of injury or illness. It is also critical in response to natural disasters.

It is an immediate and temporary treatment carried out in case of emergency, sudden illness or accident prior to the arrival of a 'doctor' or the transportation of the patients to the hospital, it is to sustain life, prevent condition from becoming worse and to relieve pain and Promote recovery.

Basic first aid does not require any special skill or equipment First aid training covers treatment of Wounds and sudden illness care for specific injuries accident prevention, and emergency procedures, knowing first aid is important for skill in handling emergency procedure, knowing first aid is important for skill in handling emergencies and accidents effectively.

Any injury or illness can benefit from prompt first aid. Some conditions, such as minor wounds or bruises, requires only simple first aid. Other conditions, such as back injuries, compound fractures, severe bleeding, or drug over-dose can become medical emergencies. Prompt first aid can sometimes mean the difference between life or, death, quick or slow recovery, and temporary or permanent disability.

Although first aid begins with action, first aid training stresses safety and prevention. Protection from physical harm, an environment free of hazards, and a healthy life style are goals for preventing accidents, injury, and illness, prevention can lead to a safer, healthier world.

A knowledge of first aid makes it possible for you to provide the action needed in an emergency. It helps you know which emergencies should be handled first, It will also give you the confidence to remain calm and to help keep others calm.

## **10.2 What to do in an Emergency**

Any sudden illness or serious injury can create a first aid emergency. First aid treatment is always influenced by the type of injury or illness. However, in an emergency, it is important to have first aid priorities.

Observe these priorities when the facts of the situation are not known, when the extent of illness or injury is unclear, or when the injured person is unconscious or unable to explain:

1. Ask for help if you need it.
2. Send someone else to get professional help. The person telephoning for help should state the phone number that the call is coming from, the location of the injured person, the type of injury or illness, and the type of first aid being given. Do not hang up until after the other party has finished asking any question.
3. Do not put yourself in danger. Calmly determine the best way to rescue someone or give help.
4. Avoid further injury to the person needing help and protect her or him as much as possible. Do not move the person except to remove her or him from danger.
5. Treat the most urgent conditions first, if you are trained be prepared to give CPR.
6. Treat or prevent shock.
7. Examine the person carefully. Treat less urgent conditions with appropriate first aid.
8. Know your first aid limits. Do not attempt something you cannot do efficiently and confidently.
9. Stay with the injured person until professional medical care arrives.
10. Remain calm

## **10.3 Types of First Aid That Requires Special Training**

Prompt first aid can be very effective. Most first aid treatment is a set of practical procedures for non-professionals. Such emergency can help the victim until professional medical help arrives or the person is transported to a hospital emergency facility. These emergency techniques do not require any special training.

Occasionally special training is required to learn a first aid procedure. Cardiopulmonary resuscitation [CPR] is a lifesaving technique that cannot be learned from book. CPR is a method of restoring breathing and heartbeat. It is important in treating victims of cardiac arrest and respiratory failure. Learn to recognize situations that require CPR, but to do attempt it without the necessary training, individuals who attempt CPR without proper training may endanger the life of the victim.

Any additional training in correct first aid procedure is helpful to make a person confident and effective in an emergency situation. Special programmes are available in many communities to teach swimming. Lifesaving, and water and boating safety. Such programmes teach people to enjoy themselves, to prevent accidents, and to be prepared in case of an emergency.

## **10.4 BITES AND STINGS**

### **10.4.1 Animal Bites**

Whenever animals or human teeth break the skin, the wound is called a bite. Any bite, especially a human bite, can cause an infection, such as tetanus. The bite of a diseased animals can cause rabies. In order to check an animal for rabies, try to get the address of its owner or carefully capture it.

#### **10.4.2 First aid Treatment:**

1. Wash the wound thoroughly with soap and water for few minutes.
2. Control any bleeding
3. Tape a sterile bandage or cloth over the wound
4. Get medical care for all animal or human bites. A tetanus booster may be needed.

### **10.4.3 Insects and Spiders**

Sources of bites and stings include bees, other insect, ticks, spiders, and scorpion. Usually insect bites and stings cause only local pain and irritation. However, some people can have severe allergic reactions. Ticks can transmit disease. To make a tick let go, touch it with a match that

has just been blown out. Scorpion stings and bites by certain spiders are poisonous and require immediate medical care.

#### **10.4.5 First aid Treatment:**

1. . Wash the area with soap and water.
2. Apply cold, wet compresses and a soothing lotion, such as calamine.
3. Get immediate help in case of fever, a sign of infection, or a sign of allergic reaction.

#### **10.4.6 Snake bites**

If you are bitten by snake, try to identify snake. Most snakes are not poisonous. different kinds of poisonous snakes found e.g rattlesnakes, copperheads, water moccasins [ and coral snakes. The first three have long fangs, which usually leave puncture makers.

#### **10.4.7 First aid Treatment:**

1. Keep the person lying still with the bitten area immobile and below heart level,
2. Tie a flat band two to four inches above a bite on an arm or leg, but not around a joint. The band should be snug but not tight
3. If the bite is poisonous, get medical care right away.

### **10.5 BLEEDING**

#### **10.5.1 Direct Pressure**

Rapid loss of blood should be stopped as quickly as possible. First try to control severe bleeding by direct pressure. Clean towels, gauze or a sheet can be used as a bandage. If none of these is available, apply pressure with clean hands.



Follow these first aid directions.

1. Cover the entire wound with a thick pad of cloth.
2. Press firmly on the bandage.
3. Do not remove the blood-stained bandages. Add another layer and continue to apply pressure until bleeding stops.
4. When bleeding stops, secure the bandage.
5. Get medical care as soon as possible.

### **10.5.2 Elevation**

Sometimes direct pressure alone cannot control the flow of blood from an open wound. Raising an injured limb higher than the heart will help stop bleeding. A bleeding open wound on the head, neck, arm or leg should be raised above heart level and direct pressure continued. If there is any possibility of a neck injury, do not move the head, if there is any sign of fracture, do not elevate an injured limb. Do not move an unconscious person.

#### **First aid directions:**

1. Apply direct pressure to the open wound.
2. If there is no sign of fracture, elevate an injured arm or leg higher than the heart.

### **10.5.3 Pressure — Point Technique**

Pressure - point technique may be necessary in addition to direct pressure and elevation. It is based on the fact that pressure on the artery supplying the affected limb may stop severe bleeding.

This technique stops circulation within the entire limb and should not be used longer than necessary. For any case of serious bleeding, get medical care immediately. Pressure points are found in the following parts of the body:

- a. Scalp
- b. Face
- c. Neck
- d. Chest/Armpit
- e. Arm
- f. Leg
- g. Hand

#### **10.5.4 Tourniquet**

A tourniquet should be used only in a life-threatening emergency when all other ways to control bleeding have failed. A tourniquet should be loosened or removed only by a physician.

##### **First aid directions:**

- 1 Wrap a two-inch band slightly above the wound on an arm or leg The band must be above a joint Tie the band in a half know.
- 2 Place a short, strong stick on top of the band Complete the knot on top of the stick. Twist the stick until the bleeding stops, then secure the stick
- 3 Note the time the tourniquet was applied and get medical care immediately.

#### **10.5.6 Internal Bleeding**

Closed wounds can result in internal bleeding instead of blood loss through the; skin. A black eye is a well known example of a small internal injury. Extensive internal bleeding can be caused by the impact of a fall or a motor vehicle accident. Be alert for the following signs of internal bleeding: vomited or coughed-up blood and blood in the urine or stools.

**First aid directions:**

1. If the person is unconscious, vomiting, or bleeding from the mouth, place the person on her or his side to prevent choking
2. Keep the person comfortably warm.
3. Do not let the person eat or drink
4. Get medical care immediately

**10.5.7 Nosebleed**

A nosebleed can be caused by an injury to the soft tissue of the nose, a cold, a disease such as high blood pressure, or strenuous physical activity. A nosebleed is usually not serious. When the bleeding has been stopped, avoid activity that might start it again

**First aid directions**

1. Have the person sit down and lean forward, or if that is not possible, lie down with the head and shoulders raised.
2. Squeeze firmly the soft, flexible part of the nose for at least 10 minutes without releasing the pressure.
3. If necessary, apply cold compress.
4. If the bleeding continues, get medical care.

**10.6 BREATHING PROBLEMS****10.6.1 Causes of Breathing Problems**

The body needs a continuous supply of oxygen to support life processes. normal breathing supplies this oxygen. When air does not move freely in and out of the lungs, breathing problems result. Severe breathing difficulties can result in respiratory failure, a life-threatening emergency. For example, a foreign object caught in the airway can obstruct the breathing process and cause respiratory failure.

Some breathing difficulties are associated with chronic medical problem. Some forms of heart diseases can cause coughing and shortness of breath. Sitting upright may relieve these symptoms.

An asthma attack can include a spasm of the larynx, wheezing, and breathing difficulty. An asthma attack can be triggered by an allergy or a respiratory infection. Help the person remain calm. Administering an antihistamine medication, if prescribed by a physician, and providing warm moist air can relieve the attack. If breathing difficulty continues or becomes worse, get medical care. Croup is another type of breathing difficulty that is particularly common among young children. As with asthma, they can be a spasm of the larynx along with a croaking cough and breathing difficulty. Steam, possibly from a vaporizer, usually relieves the symptoms of croup. However, croup can be a dangerous situation. If breathing become more difficult and exhausting, or if there is a sudden high fever or drooling, seek immediate medical care.

### **10.7 Hyperventilation**

Hyperventilation [ fast breathing] is often caused by emotional stress. It can be frightening and may be confused with a heart attack or a mental disorder. Symptoms include a sense of not getting enough air; sharp, short pains in the chest or stomach, and a feeling of dizziness. In an older adult, especially one with a history of heart disease, immediate medical care should be obtained for chest pain.

**For young, otherwise, healthy person, follow these first aid directions:**

1. Be calm and encourage slower breathing.
2. Have the person breathe into a paper bag or cupped hands to re-breathe the same air.
3. If symptoms continue, seek medical care.

### **10.8 Mouth to Mouth Resuscitation**

In some cases of severe breathing problems, normal breathing stops or is ineffective. Respiratory failure is a life-threatening emergency that requires immediate first aid.

Artificial respiration is a first aid procedure that forces air into the lungs. The mouth-to-mouth technique is considered the most practical and effective method of artificial respiration. If artificial respiration is necessary, so is professional assistance. Send someone for immediate help. In cases of carbon monoxide poisoning, drug overdose, or electric shock, artificial respiration may be needed for a long time.

**First aid directions:**

1. Place the injured person on his or her back.
2. To open the airway tilt the injured person's head back with the chin pointed upward, using one of these two methods.
  - a. Head tilt-chin lift. With one hand on the person's forehead, gently tilt the head backward. With the other hand, place your fingertips under the bony part of his or her jaw and lift the jaw gently. Be careful not to close the mouth completely.
  - b. If you suspect a back or neck injury, gently lift the person's jaw forward without tilting the head.
3. Clear out the mouth and check for breathing.
4. If there is no breathing, pinch the nostrils closed.
5. Take a deep breath and seal your mouth completely over the injured person's mouth. Blow four quick full breaths into his or her mouth.
6. If there is a pulse and no sign of breathing, give at least one breath every five seconds.
7. When the person's chest is expanded, raise your mouth, turn your head to the side, and take a breath. Listen carefully to hear whether breathing has started.
8. When the person's chest falls, continue the blowing cycle until the person begins to breathe.

9. If there is no pulse and no breathing, CPR is necessary. If you have not had CPR training, give artificial respiration unless you are sure that the person is dead.

## **10.9 BURNS**

### **10.9.1 First - and Second - Degree Burns**

Burns are described by the depth of skin damage. Burns can result from the sun, hot liquids and objects, electricity, and chemical. In a first-degree burn, the outside layer of skin becomes red. There may be mild swelling and some pain.

In second — degree burns, the skin appears red and blotchy. Blisters and swelling often develop. Pain is more severe.

#### **10.9.2 First aid Treatment:**

1. Put the burned area in cold [ ice] water.
2. Pat it dry and cover it with a clean dressing
3. Do not break blisters that develop from a burn.
4. Seek medical care if the face or a large area of the body is burned.

### **10.9.3 Third Degree Burns**

Third- degree burns can destroy nerve endings and all layers of skin. The skin looks white or charred. There may be little or no pain. Burns of the face may be accompanied by respiratory burns and breathing problems.

1. Cover the burned area loosely with a sterile dressing or clean linen to avoid infection.
2. Keep burned arms and legs above heart level. Do not let the person walk.
3. Watch for breathing problems and keep an open airway.
4. Apply cold packs to burns on the face, hands, or feet.
5. Seek medical care immediately.

#### **10.9.4 Chemical Burns**

Skin injury caused by irritating chemicals is called a chemical burn. Household and garden products, such as fertilizer, bleach, ammonia, and many other cleaning agents, are frequent causes of chemical burns. It is important to read all product labels carefully. The aim of first aid is to remove the irritating substance as quickly as possible.

#### **Follow these first aid directions**

1. Wash the area with large quantities of water for at least 15 minutes. Remove any contaminated clothing during the washing.
2. Cover the burned area with a sterile dressing to avoid infection.
3. Seek medical care.

#### **10.9.5 Universal Choking Signal**

A person who suddenly cannot breathe, cough, or speak may be choking. Choking occurs when a solid object lodges in any part of the airway. Choking can be a life—threatening emergency. The risk of choking is increased by chewing food inadequately, talking with a mouthful of food, wearing ill-fitting dentures, or drinking alcohol before eating. Be sure you know how to make and recognize the universal choking signal.

#### **Signs of choking include:**

1. sudden collapse
2. unconsciousness
3. bluish colour of face, neck, or hands ineffective coughing
4. wheezing or breathing difficulty

#### **10.9.5 First Aid for Choking**

First aid for choking is important because the time that someone can live without breathing is very short. First, encourage the choking person to cough. If he or she can only cough weakly, is breathing with difficulty, or cannot speak, immediate first aid is necessary.

For a conscious adult, first aid consists of the Heimlich maneuver described below:

1. Stand or sit behind the choking person with both arms around the waist.
2. Place the thumb side of your fist against the person's abdomen, halfway between the waist and the tip of the breastbone.
3. Grasp your fist with your other hand.
4. Press your fist into the choking person's abdomen with four quick, hard, upward thrusts.
5. If the person loses consciousness, someone trained in CPR should continue first aid.
6. A choking person can perform the Heimlich Maneuver on himself or herself by leaning over the back of a chair. Give thrusts by pushing upward and in against the abdomen.

## **10.10 CONVULSIONS/ELECTRIC SHOCK**

Convulsion can be associated with a head injury, with a high fever or illness in young children. During a convulsion, a person becomes unconscious and the body may become stiff or move violently. First aid is important to prevent injury and choking.

### **Follow these first aid directions:**

1. Clear away furniture and sharp objects: loosen tight clothing.
2. Do not restrain the person, put anything in his or her mouth, or give the person anything to eat or drink
3. If the person is unconscious after a convulsion lay the person on his or her side.
4. Get medical care.

### **10.10.2 Electric Shock**

Electric shock is the result of an electrical current. Low voltage electric current that passes through the body can cause burns, high voltage current can also stop breathing and heart activity.



Electric shock is a common danger, especially in the home. Prevention is important. Get electrical wiring inspected, be sure appliances are properly wired and grounded, and do not overload circuits.

In case of electric shock, avoid touching the injured person or the source of electric current. Turn off the current by unplugging the appliance or turning off the circuits.

If necessary, separate the injured person from the source of electricity. Be careful to protect yourself. Be sure your hands are dry and stand on dry insulating material [newspaper or a rubber mat]. Use a dry, wooden pole or board to separate the injured person from the source of the current.

**Follow these first aid direction:**

1. Cover the burned area with a sterile dressing. Looking for two burns — where electricity entered and exited the body.
2. If the person is conscious, have him or her lie on the back, with the legs elevated.
3. If the person is unconscious place him or her on the side, with the head supported.
4. The person may go into shock for treatment.
5. In case of respiratory failure, CPR training may be necessary to continue first aid.
6. Get medical care.

## **10.11 EXPOSURE TO COLD AND HEAT**

### **10.11.1 Exposure to Cold**

Exposure to cold result in hypothermia [ body temperature] and/or frostbite [ tissues]. High ind and humidity increase the danger of injury in cold weather. Avoid hypothermia by keeping as warm as possible. Stay rested: drink hot non-alcoholic drinks; wear warm, dry clothing, and cover the face, head, and ears.

When frostbite occurs, skin colour changes to white or grayish - yellow. Blisters often develop. Follow these first aid directions for frostbite.

- L      Protect the frozen body part.
- 2.      Warm the frozen area in warm [ hot] water. DO NOT rub the area or break blisters.
- 3.      Get immediate medical care.

### **10.11.2 Exposure to Heat**

Exposure to heat can result in heat exhaustion, heat cramps, or heat stroke. When more heat is produced than can be taken away by sweating, the body cannot cool itself adequately and becomes overheated.

The symptoms of heat exhaustion include excessive perspiration, headaches, and nausea. These symptoms can be relieved by lying down in a cool [ cold] place. Be careful to avoid strenuous activity and hot sunshine for a few days.

Heat cramps are often associated with heat exhaustion. Cramps are most likely to affect the muscles of the legs and abdomen. Stretch the injured muscles and massage them with the heel of the hand. Then apply heat or soak in a warm bath.

Heat stroke [also called sunstroke] is a life-threatening emergency. The symptoms of heat stroke include very high body temperature, skin that appears hot and dry, lack of perspiration, and rapid pulse. Heat stroke requires immediate first aid to cool the body.

#### **Follow these first aid direction for heat stroke**

- 1.      Sponge the person with cool water or rubbing alcohol, or place him or her in a tub of cool water.
- 2.      Move the person to a cool, well-ventilated place. But avoid cooling the person down too quickly.
- 3.      Repeat first aid treatment if the temperature begins to rise again.

4. Get immediate medical care.

## **10.12 FRACTURES, SPRAINS, AND DISLOCATIONS**

### **10.12.1 Types of Fractures**

There are different kinds, of injuries to the skeletal system. A fracture is a break in the bone.

A simple [closed] fracture occurs under the skin A compound [ fracture breaks the skin, often with bone protruding from the skin. Bleeding can be seen and there is always a danger of infection. An x-ray is always necessary if a fracture is suspected.

### **10.12.2 Sign of possible fracture include:**

Rainfall movement	pain
Abnormal shape	numbness
Swelling	skin discoloration

### **10.12.3 Principles for Treating Fracture**

Any bone in the body can be fractured. Simple fractures are the most common type: compound fractures can be more complicated because of the open wound and danger infection. Bone injuries must be treated promptly to minimize pain and disability.

Remember that the location and types of fracture determine the specific first aid procedure. However there are first aid principles that apply to all fractures regardless of location. Be careful keep the area around the joints around the broken bone from moving. Be alert for signs of shock.

### **10.12.4 First Aid Treatment:**

1. Do not move the injured person unless he or she is to be pulled away from immediate danger.
2. Stop any bleeding

3. Keep an open airway
4. Examine for other injuries and treat them as necessary
5. Try to immobilize the part of the body where a fracture is suspected.
6. Get an x-ray and medical care.

**Follow these additional first aid direction for a compound fracture:**

1. Control serious bleeding
2. Remove or cut away clothing if necessary
3. Do not try to wash or probe the wound. DO NOT replace bone fragments.
4. If bone is protruding. cover the entire wound with a sterile dressing.
5. Be prepared to treat for shock.
6. Get immediate medical care.

#### **10.12.4 Splinting**

A splint is used to immobilize an injured joint or bone. A splint can help decrease pain, minimize shock, and prevent further injury.

A splint can be made from any rigid material, such as a board or a rolled-up blanket, and held in place with cloth strips or belts. The location and type of injury determine the type of splint. However, there are general instructions for splinting that apply to all injuries.

**Follow these first aid directions.**

1. Elevate the injured joint.
2. Apply cold packs to help reduce swelling.
3. Do not pack the injured joint in ice or immerse it in ice water.
4. Do not let the person try to walk on an injured knee or ankle.

5. Get medical care.

### **10.12.5 Dislocation**

A dislocation occurs when a bone end is out of place. It results from placing a joint under too much stress. This usually results from a direct blow or a fall.

#### **First Aid Treatment: -**

1. Do not move the affected joint.
2. Splint and immobilize the joint.
3. support the limb with a sling or elevate it. Avoid putting pressure or weight on it.
4. Do not try to correct the deformity. This could injure nerves and blood vessels.
5. Get medical care.

## **10.13 HEAD INJURIES**

### **Scalp Wounds**

A scalp wound is a type of head injury. Even a simple Scalp wound can be more serious than it seems Scalp wounds can be deep and bleed heavily.

1. Do not try to clean the wound unless it is very minor.
2. Raise the person's head and shoulders. Do n bend the neck.
3. Cover the wound with a sterile dressing.
4. Get medical care.

### **10.13.1 Signs of Severe Bead Injury**

A serious blow to the head can cause a COflCUSS10fl, or skull fracture. These are severe head injuries. The signs of severe head injuries may appear imrnediately or within 48 hours of an accident. Any person who has received a serious blow to the head should be watched carefully for 24 to 48 hours.

**Signs of possible severe head injury include:**

- drowsiness
- slurred speech
- loss of consciousness
- pupils of unequal size
- paralysis
- Vomiting
- Clear or blood fluids from the nose, ears, or mouth loss of memory

### **10.13.2 Concussions/Fractures**

Any head injury requires medical attention. Skull fractures and concussions can cause internal bleeding and brain damage. With any head injury there is the possibility of nec injury, which could cause paralysis. Do not move the person unless he or she must be pulled away from immediate danger.

### **10.13.3 First Aid Treatment:**

1. Keep the person lying down.
2. Keep an open airway.
3. If there is a scalp wound, cover it with a sterile dressing
4. Do not give food or drink.
5. Note the time of injury.
6. Get medical care as soon as possible.

### **10.13.4 Muscle Strains and Tears**

Muscle strains and tears, are caused by over-exertion The muscle feels tender and may become swollen. Late (often overnight) it may become stiff. First aid treatment can provide relief for the pain and promote healing ( the injured tissue. Get medical care if the area is badly swollen or very painful.

Follow these first aid directions:

1. Rest the muscles involved.
2. Elevate the limb to minimize swelling of strained arm or leg muscles.
3. Apply cold compress or ice packs to relieve pain.

4. After 24 to 48 hours, apply warm compress or heat increase circulation.

### **10.13.5 Muscle Cramps**

The sharp pain of a muscle cramp is caused by a sudden knotting of a muscle. A muscle cramp can occur during exertion or while the body is at rest. A leg cramp is sometimes called a “Charley horse.”

Muscle cramps are uncomfortable but rarely dangerous. They are common during pregnancy but are not significant. Leg cramps often disturb the sleep of older people.

Heat cramps are painful muscle spasms. They are most likely to affect abdominal or leg muscles. A person who experiences muscle cramps during exercise on a hot day may need to be treated for heat exhaustion as well as for heat cramps.

Any muscle cramp can be dangerous to a swimmer if he or she is incapacitated by pain or panic.

Most muscle cramps respond quickly to massage and heat. If the cramps are not relieved by first aid or continue to occur, get medical care.

#### **Follow these first aid directions:**

1. Gently but quickly stretch the cramped muscle. If the cramp is in an arm or leg, bend the limb gently back and forth.
2. Firmly massage the knot in the stretched muscle with the heel of the hand.
3. For a cramp in the calf or the sole of the foot, place the foot flat on the floor. Lean forward with full body weight and massage the muscle.
4. Apply heat to the cramped muscle by using a heating pad, a hot water bottle wrapped in a pad, or by getting into a warm bath.

### **10.14 Swallowed Poison**

A poison is a substance that damages health and may cause death when it is introduced into the body. Many cleaning agents, house and garden plants, and garden products are very toxic when swallowed. Swallowed poison is also called poisoning by mouth. When poisoning has occurred or is suspected, first aid is needed quickly. Try to discover what

product has been swallowed so that correct procedures can be followed. Remove any poison from the person's mouth. A child may need to be prevented from eating or drinking more of the poison.

Call the local poison control centre and follow their instructions. Keep this phone number posted near a telephone. If there is no local centre, call the closest hospital emergency facility or a doctor. Do not rely on product labels for instructions. If there is no professional advice, be prepared to take steps to dilute the poison, maintain vital body functions, and get immediate medical care.

Do not induce vomiting if the person is unconscious or having convulsions; if the product swallowed was an acid, alkali, or petroleum product; or if it is not known. Do not give fluids if the person is unconscious or having convulsions. Keep an open airway, treat any convulsions, and call for immediate medical care.

Otherwise, follow these first aid directions as appropriate.

1. Induce vomiting by one of these methods;
  - a. Giving syrup of ipecac — one tablespoon for children two tablespoons for adults.
  - b. Tickling the back of the person's throat with a blunt object.
2. Save the label and or container of suspected poison.
3. Save any vomited material.
4. Prevent shock. Artificial respiration or CPR may be necessary.
5. Get immediate medical care.

Poisoning is an emergency that can be prevented. Pills and medicines should be carefully labelled and stored out of the reach of children. Flousehold and garden products that can be poisonous should be securely closed. These should then be safely stored out of the reach of small children.

#### **10.14.1 Inhaled Poisons**

Inhaled poisons are smoke, gases and fumes. Warning symptoms of poisoning include dizziness, headache and weakness. In treating another person, it is important to protect yourself. Take a deep breath of fresh aid and hold your breath before entering an area filled with fumes. Remove the injured person to fresh air. Send for immediate medical care and oxygen.



**Follow these first aid directions:**

1. Check the person's breathing. CPR training may be necessary to continue first aid.
2. Loosen tight clothing.
3. Prevent shock and treat other injuries.
4. If the person is conscious, elevate the head and chest to ease breathing

**10.15 Drug Overdose**

A drug is a substance that affects the function of the mind or body. Drugs include alcohol, marijuana, hallucinogens, stimulants and tranquilizers. Even drugs that are safe when used in small amounts may be poisonous when taken in large doses or over a long period of time. Poisoning can be avoided by properly labelling and storing drugs. Keep all drugs away from small children.

A drug overdose can be a life-threatening emergency. Try to determine the type of drug taken, the amount, and the time it was taken. Then call a local drug abuse centre or poison control centre and follow the instructions for specific treatment. If this centre cannot be quickly identified, call a hospital emergency facility or a doctor. If there is no professional advice, be prepared to give general first aid.

Drug withdrawal after prolonged use can also produce severe symptoms. General first aid care is again important until professional medical help is received. In the case of drug overdose or withdrawal, get immediate medical care.

**Follow these first aid directions.**

1. Check the person's breathing, CPR training may be necessary to continue first aid.
2. Maintain an open airway and normal body temperature.
3. Care for a convulsion if necessary.
4. Be reassuring and keep the person calm. Try to keep her or him awake.
5. Follow directions for swallowed poison, if appropriate.
6. Get medical care.

## **10.16 Shock**

Shock can result from any condition or injury that severely lowers blood pressure and vital body functions. Shock is not the same as electric shock, but a person can go into shock from a severe electric shock. Shock is a life-threatening emergency, even if the injury or condition that has caused it is not fatal. Be alert for these possible symptoms of shock.

### **10.16.1 Early Symptoms of Shock:**

pale, moist, clammy skin

rapid breathing

weakness and nausea

rapid, weak pulse

### **10.16.2 Advanced Symptoms of Shock:**

unresponsiveness

unconsciousness

vacant look, dilated pupils,

mottled skin

### **10.16.3 Preventing and Treating Shock**

Prevention is an important part of treating shock. The injury or condition that causes shock is often severe. If signs of shock exist, act right away to alleviate them. Then take steps to prevent a more serious degree of shock. Be prepared to give first aid to treat the illness or injury that resulted in shock.

Shock can be fatal, and even mild shock can become more severe without proper first aid, improved circulation, adequate oxygen, and normal body temperature minimize the effect of shock. They are the objectives of preventing and treating shock.

#### **Follow these first aid directions:**

1. To improve circulation, keep the injured person lying down in one of these positions:
  - a. Flat on the back, if there is doubt about the correct position.

- b. On the side, if the injured person may choke on vomit, is unconscious, or has serious facial injuries.
  - c. On the back with head and shoulders elevated, if this improves breathing or if there is no danger of choking and no sign of head, neck, or back injury.
  - d. On the back with only the feet elevated, if this improves the condition,
- 2. To conserve body heat, place blankets or clothing over and under the injured person. Do not overheat the injured person.
  - 3. Do not give anything to eat or drink.
  - 4. Do not move the injured person if there is a possible neck or back injury.
  - 5. Get immediate medical care.

## **10.16 Poisonous Plants**

Poison ivy, poison oak, and poison sumac cause allergic reactions in four out of five people.

Every part of the poison ivy plant can cause a rash. The sap can spread through contact with clothing, pet fur, or garden tools. The smoke from burning poison ivy can be extremely dangerous to the lungs and eyes. Poisonous plants should be destroyed carefully, with a chemical spray. Do not cut them down; they will grow back from the roots. Be sure to thoroughly wash all clothing worn when spraying poisonous plants.

### **10.16.5 Reactions to poisonous Plants**

The rash produced by the plants in the poison ivy group is characterized by redness and itching. The rash may also produce oozing blisters and a burning sensation. Sometimes a headache or high fever accompanies the rash. The symptoms can appear immediately or within 48 hours after contact.

#### **Follow these first aid directions:**

- 1. Remove contaminated clothing.
- 2. Wash all affected areas.
- 3. Use calamine or another soothing lotion.

4. Get medical care for a severe reaction, a history of sensitivity, a rash on the face or genitals, or if plant parts were chewed or swallowed.

#### **10.16.7 Other Skin Contact Poisons**

Other skin-contact poisons include harsh or corrosive chemicals frequently found in household and garden products. On Contact with the skin, these poisons can produce a chemical burn. If the poisonous substance is a pesticide or a strong acid, emergency medical care is necessary. Other first aid for skin-contact poisons is similar to that for chemical burns.

##### **First Aid Treatment:**

1. Remove contaminated clothing.
2. Wash away the poisonous substance with large quantities of water.
3. Get medical care if the chemical burn is extensive.

#### **10.16.8 Unconsciousness**

##### **Possible Causes and First Aid Priorities**

There are many possible causes of unconsciousness. Sometimes unconsciousness is brief — as in fainting and not related to an injury. Other time unconsciousness is related to an injury or medical problem. It can be caused by injury-related should respiratory failure, convulsions, exposure, head injury or sudden illness. Unconsciousness can signal a medical emergency.

When a person is found unconscious, immediate first aid is important. Information about the events that resulted in unconsciousness may be limited unavailable.

Remember the first aid priorities. Especially remember to avoid injury or danger to yourself and to protect the injured person from further danger or damage.

Medical treatment is always required unless the condition is very minor. Send for medical care or take the person to the (nearest hospital emergency facility

##### **Follow these first aid directions before giving treatment for specific injuries.**

1. Confirm unconsciousness. See if the injured person responds to a shout or a firm tap on the shoulder.

2. Check for any sign of breathing Artificial respiration or CPR may be necessary to continue first aid.
3. Prevent and treat shock
4. Check for injuries. If there are any, treat the: appropriately.
5. Get immediate medical care.

### **10.17 Fainting**

When the blood supply to the brain is interrupted for a short time, the result Can be a momentary loss of consciousness. Fainting can occur suddenly or be preceded by symptom of including dizziness, nausea, paleness and sweating.

A person who feels faint should lie down or bend over with the head down.

#### **Follow these first aid directions.**

1. Act quickly to prevent injury from a fall.
2. Keep the person lying and loosen any tight clothing
3. Sponge the person's face and forehead with cool water.
4. Get medical care if recovery is not rapid

### **10.18 Heart Attack**

If suddenly constant chest pain occurs, suspect a heart problem. A heart attack is caused by the blockage of a coronary artery. An attack may be mild or result in sudden death. To reduce the risk of heart attack maintain proper weight, keep blood pressure down. get regular exercise and medical checkups, and eat foods low in fats and cholesterol; avoid smoking.

Be alert for the signs of a possible heart attack. They include tight crushing chest pain that can radiate to arms, shoulders, or neck; severe shortness of breath; weakness; sweating bluish Colour or skin or lips; and nausea. If a heart attack is suspected the first step is to calm and reassure the person.

If there is any history of heart trouble or the chest pain is accompany by other danger signs treat the condition as a heart attack. Get immediate medical care and be prepared to give prompt first aid treatment.

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