Chapter I

INTRODUCTION

Throughout the animal world death is the rule and life is exception. The mature female lobster may produce 10,000 eggs but less than half a dozen of the young are likely to reach full maturity. In general higher the animal in the scale of evolution, the fewer are the offsprings, the better the care of the young, lower the death rate.

Man has conquered the famine by the skilfull production and storage of food. He has learned to protect himself from the inclemenices of weather. He has subdued or exterminated animal which were once his mortal enemies. His battle against disease in all its form is one phase of continuing struggle to improve the security and the quality of existence. The knowledge which he has collected concerning a cheerful life is related to health knowledge.

Over the past few years, there has been an exponential growth in concern for and discussion of health and what individuals can do to promote and improve their own health. Naisbitt\textsuperscript{1} sees it as a developing "triumph of the paradigm of wellness, preventive medicine and holistic care over the old

model of illness, drugs, surgery and treating symptoms rather than the whole person."

Health is neither an acquired piece of scientific knowledge nor a thing as a part of man as are hair, eyes, blood circulation, metabolism, hearing and breathing. Man does not discover what health is. There are no universally established standards or criteria to identify what health is, Man can only presuppose the notion of health and offer definitions relative to the principles and presupposition that are operative in his way of thinking about health. The concept of health is a human construct that we invent in accordance with our cultural values, social surroundings and norms.

According to Justus,² health is "the rich man's blessing and the poor man's wealth". He has most vividly brought the importance of health in life.

Nevertheless, no body has yet been able to devise a description that is clear-cut and comprehensive enough to give universal acceptance. Statement describing health range from the comfortably direct, "Health is what enables

---

a person to be what he wants to be and to do what he wants to do","3 to more elaborate statements such as "Health is a dynamic ecological resultant involving the interaction of many complex predisposing, precipitating and perpetuating factors and conditions".4

If there is a universally accepted definition it has to be that of the world Health Organisation (WHO), "Health is a state of complete physical, mental and social well being and not merely the absence of disease and infirmity."5

Health is influenced by heredity, environment and behaviour but the tendency and ability of the body to adjust automatically to changing conditions and to maintain normal functions is a powerful force in health maintenance.

The person with basic health knowledge finds health maintenance interesting, relatively simple and immensely rewarding. It is the hygienically illiterate person whose worry and fear drive him from one health fed or fallacy to another.


4 J. Hoyman A Rational For Health Education in School (Seond Issue Med. Suppl.29, 1982), p.49.

Therefore, a National Health Policy is formulated by the Ministry of Health and Family Welfare (Government of India) in 1983, keeping in view the national commitment to attain the goal of "Health for All" by the year 2000 A.D.\(^6\)

Now, health maintenance is no longer being viewed as the sole responsibility of the clinical domain, but as an individual responsibility and a major new opportunity for a vast array of professional interest.\(^7\) The contentious issue of who is responsible for one’s health remains one of the darker sides to the life style issues. "If one assumes that lifestyle affects health status and if one further assumes that individuals freely choose their own life style, then one can argue that individuals are personally responsible for their own health".\(^8\) Since life style is so strongly related to consumption patterns health promoters have aimed most of their interventions at people with resources. One needs knowledge, time, opportunity, motivation, a usable body, a supportive environment to maintain the health and fitness. The

---

\(^6\) Report of Working Group on Health For All By 2000 A.D., Ministry of Health and Family Welfare (Govt. of India, 1981).

\(^7\) D.B.Ardell High Level Wellness: An Alternative To Doctors, Drugs and Disease, (P.Aroadale Press 1977), p.203.

physical education teachers and coaches are providing increasingly sophisticated prescriptions for exercise, stress reduction, diet modification and so on which they apparently consider feasible for every student and player.

In 1850, Lemuel Shattuck’s famous report of the sanitary commission gave school health programme strong support. He said, "Every child should be taught early in life, that to preserve his own life and the lives and health of others, is one of the most important and constantly abiding duties. By obeying certain laws, or performing certain acts his life and health may be preserved, by disobedience or performing certain other acts, they will both be destroyed. By knowing and avoiding the cause of disease, disease itself will be avoided and he may enjoy health and live, by ignorance of these causes and exposure to them, he may contract disease, ruins his health and die. Everything connected with wealth, happiness and long life depends upon health and even the great duties of morals and religion are performed more acceptably in a healthy man than in a sickly condition."\(^9\)

So the need was felt for education for healthful living. The focus in this instance is on the body of knowledge with which health education is concerned.

---
Many experts explain health education as the process involved in bridging the gap between supplying people with information about health and teaching them how to use it in solving or preventing health problems.

According to Paideia proposal, the goals of general education are those also of health education and achievement of the concept and skills of one contributes to those of the other.

There can be no general education without the inclusion of health education. It is the most basic of all the basic studies. There may come a time when health education and general education become fully integrated. It may be hard to tell where one leaves off and the other begins.\(^\text{10}\)

A comprehensive health curriculum covers the entire scope of health knowledge. Corlyen\(^\text{11}\) supports this point of view, "As I understand it, health instruction curriculum shares the overall goal of the entire school curriculum which is to help students become knowledgeable, critical, independent learners. Health curriculum more than the rest of the curriculum focuses upon


\(^{11}\) R.M., Carylon Renforcing the Case For Health Promotion, *Family and Community Health*, Van Notron Reinhold Co. New York, 1980, p.120.
knowledge, critical abilities and learning skills to normal growth and development and maintenance of well being. It is assumed that people so equipped are more likely to live a healthful life than those who are not." That is what health knowledge means to physical education teachers and coaches, not only changing the health behaviours but teaching youngsters how to choose the kinds of health behaviours that can enhance the quality of every aspect of their lives, not just for today, but for all the tomorrows they will have.

Therefore, health education has been brought into the field of general education, so that an individual may develop favourable attitude for healthful and joyful life. Health education is perhaps the largest of the areas allied to physical education. Physical education has an important contribution to make to health education and vice versa, Inherent in Physical Education are exceptional opportunities to develop health knowledge, health habits and attitudes. The majority of physical education in schools, colleges, universities have important responsibilities in regard to institutional health programmes. It is important that student in health education programmes experience loving role model acknowledge themselves as person having faith in the potential development of goodness and a non-threatening environment. Having an opportunity to experience these supportive elements in a teaching learning situation should aid in their cooperation into the future health programmes
with which these students will be involved.

The nature of health and its development implies the need for a programme which enhance rather than diminish the quality of the life of the student.

Better health will come of course, not only from the mere acquisition of health knowledge but also from its application. Your health depends not upon what you know but upon what you do. It is maintained by healthful living, by a continued hygienic regimen, by doing and not by merely thinking or wishing or knowing. Obviously health knowledge will not produce health until it is used. Fuel will not produce heat until it is burnt, but that does not render it useless. So the need is to motivate and help people to adapt and maintain healthy practices and life styles.

Health practices have been with us from a long time. They are as old as yesterday as contemporary as today, as modern as tomorrow. Health practices have ever been the lifeflow of the nation’s progress, Good health practices are the life generating forces for the advancement of civilization. A nation stands firm, if its people follow the desirable health practices in their day-to-day life. Since the school going children and youths happen to be the
future citizens of a nation they certainly need to be educated for the basic health practices for their healthy and happy life in particular and for a healthy nation in general.

Health practices in the life of an individual or in community are expression of a number of factors including habits and attitudes as well as knowledge. In every day living most people fall below what they know to be the best in health practices.\textsuperscript{12}

The terms 'health practices' and 'health habits' as sometime used interchangeably. There are differences among them, however, that need to be recognized and adhered to in use. Health practices are ways of coping with or satisfying immediate health needs (e.g., as in food selections, care of teeth and gums, personal grooming, maintaining balance among sleep, rest and recreation, use or abuse of harmful substances etc.)

Health practices are not always consistent, but whether their effect is health enhancing or health compromising, each action is taken deliberately. A decision has been made one way or the other. For example, a person may

choose a Candy bar for a snack, although fresh fruit is also available and was
the choice the day before or visit a dentist for scheduled checkup rather than
spent the day at the beach.

Health habits are learned and consistent way of coping with health
related urges or needs. A health practice can become a health habit and often
does. A transition occurs when the individual carries out the practices without
giving it any thought at all. Habits differ from health practices precisely in
that way. Habits are actions taken at an unconscious level. For example often
smokers are so accustomed to a cigarette as an accompaniment to coffee
drinking that no decision is necessary or made. They simply reach for a
cigarette as a part of the coffee drinking patterns.

In maintaining health, you are caring a mechanism, the human
structure or human mechanism which has no equal. It is the most precious
gift of nature, one of its most remarkable qualities is the constant tendency to
keep itself in physical balance or dynamic equilibrium.

All living organisms show distinctive patterns of organisation with
respect to time and space. Temporarily these involves orderly sequence of
physical and chemical events which are conventionally described in terms of
movements, metabolism, growth, differentiation, reproduction, reactivity to external changes and evolutionary progression. Specially, these sequences are not hazards but arranged in a complex structural framework which determine their direction and co-ordination.  

The human animal or structure is a very complex multi cellular organisation in which the maintenance of life depends upon a vast number of physiological and biochemical activities. The sum of these activities enable the human being to live in and utilise his environment, and to maintain the species by reproducing.

The human structure has its ultimate base on a molecular scale. The biological molecules are arranged in complex aggregation, are the organelles, multiples of different types of organisms are further combined in specific membrane bound units or cells. The cell is an important unit, since it is the smallest aggregation to show all the major features of living organism. Multiples of cells are grouped together, with spatial differentiation of different regions, to perform particular roles, such as digestion, reproduction and so

---


forth. These may have the farm of single co-operative layers of cells or tissues. Multiples of tissue layers are further grouped together to carry out more complicated co-operative actions, these constitute the organs of the body. Finally, the whole consortium of organs, co-ordinated and unified by specialised communication systems, is capable of the directed and self directing activities which characterize human life.¹⁵

The human structure can also be defined like a device such as the automobile automatic gear shift which makes needed adjustment by itself. When the engine approaches an un-economic rate of operation there is an automatic shift to a higher gear. The human structure likewise has innumerable automatic physiological mechanism. But such compensatory mechanism will not maintain health inspite of every possible injury such as poison, abuses of un-hygienic living but it is encouraging to know that you have such mechanism.

India being a land of religions and mystic philosophies the people are orthodox, conservative and superstitious. Because of this our customs and traditions sometime do not permit development of positive attitude towards health and its practices. People are not able to attain better health due to lack

¹⁵ Ibid., p.3.
of favourable attitude towards health. So a strong need was felt to introduce a
media by which the people specially the students and youth can be made
aware of importance of healthful living and therefore Health Education Council
and Sport agencies in India have initiated several mass media campaigns
which are directed to make people aware of the hazards inherent in healthy
life style.

Sports and physical education can become one of the best medias to
motivate and teach the students/youths about the necessity of successful living,
working and its dependence on health and fitness.

Perhaps sport is one of the splendid farms of 'play' in social life, in which
coaches play a leading role. The importance of Coach's behaviour has received
increased attention in recent years. A widespread belief in our society now is
that coaches have significant role for the athletes. They have a profound
influence on the athletes, not only on the physical abilities, technical skills,
social emotions and values but also have a considerable impact on personal
life, daily routine, duties and moral growth. It generally means that the coach
does more than one thing (coaching for athletes).\footnote{Wong Run-Ping, The Coach's Role in Coach-Athlete Relationships - A Social Psychological Perspective, Proceedings of The 8th World Congress of Sport Psychology, Lisbon, Portugal June 1993, p.324.} Infact coaches play many
roles in the process of coaching.

In order to pursue excellence in performance, the coach has to be a designer in setting goals, making out decisions and carrying out plans, just as a film director.

As a representative of social organisation, the coach must propagate general social value and instruct the social behaviour standards to athlete, as an educator.

Like a teacher the coach has to care for athletes’ academic work as supervisor.

Just as an instructor and administrator the coach must deal with athletes’ daily life, routine duties, observing proper growth and development, assessing health and fitness level, thus serving as a ‘parent.

The coach often plays the role of an advisor or advocate for athletes helping them to explore alternative, meet challenges, make choices in life and deal with the sequences of success and failure.\(^{17}\)

The overall patterns of coach’s behaviour is a very important social influence factor that has a considerable impact on the athletes’ attitudes and

\(^{17}\) Ibid, p.325.
reactions. The coach's health knowledge and life style help the athletes to adapt healthy patterns and stay away from the risk and hazards of unhealthy practices. "Action speak louder and have greater impact than words." The coach as the practical role model has a great impact on the athletes' life. Greater the knowledge, the more valuable a coach becomes and the greater is his contribution to the whole programme.

The coach should also possess the knowledge of human structure because one of the decisions coaches may have to make concerns the question as to whether or not an athlete who suffered an injury prior to a competition should still participate in that competition. The decision may be fairly straightforward, it is obvious that the athlete cannot use the affected body part, however, in many situations despite pain and functional limitations, athletes still express a desire to compete. Particularly highly motivated athletes tend to show various degree of denial with regard to an injury, some time disregarding medical advice and engaging in activities that are not conducive to proper healing. Here, the coaches by virtue of their leadership, are expected to provide responsible care and help the athletes select appropriate activities during process. Actually the coaches are persons who assume that

---

they will achieve a high degree of the intricacies of a game or because they themselves were outstanding performers need to realize that this is only a part of coaching. The most crucial prerequisite of successful coaching is the ability to understand people rather than the mechanics of a game.\textsuperscript{19}

In the preparation of people for living successfully in a democratic society, the teacher plays the most important part. The teacher is the basic factor in the educational process and the quality of the teacher largely determines the quality of the results. An intelligent, well prepared teacher with a wholesome personality and sound philosophy of education has a greater opportunity than any other members of the society to prepare boys and girls to become good citizens.

Physical education teachers can probably have more influence in developing the attitudes and shaping the ideals of their pupils than the teacher of class room subjects. These opportunities, combined with those for the increase in vitality through the development of organic systems of the body and preparation of individuals in leisure time activities place teachers of physical education in a most strategic and challenging position. Studies in such subjects as sports medicine, dietetics, growth and development, anatomy,

physiology, health education etc. have become necessary and form the irreducible minimum of training for teachers of physical education.\textsuperscript{20}

If physical education teachers are to achieve a real professional status it is essential that they accumulate and be familiar with a large body of accurate knowledge and skills peculiar to their field, which will have the same meaning to all persons with adequate professional preparation.\textsuperscript{21}

Biddle\textsuperscript{22} supports this when he suggests that background knowledge about health and fitness should be offered in the physical education programme. Yet physical education have continued to stress skill development as one of the major objectives of their programme and appear to prepare a competitive sports oriented curriculum which favours only the talented few.\textsuperscript{23}

\begin{flushleft}

\textsuperscript{21} Ibid., p.21.


\end{flushleft}
Studies by Hendry\textsuperscript{24} suggests that this elitist attitude of physical education teachers, with their preference for traditional team spirit, may not be due to a school system that reinforces the importance of winning teams and sport trophies, but also to the affect of a teacher training system that may support these values.

But attitudes may be changing. According to the school council enquiry, many younger physical education teachers are giving greater priority to the social consideration of their subject, and may be more susceptible to an extension of their role in the school to include consideration of the personal and social developments of the total school population. The emphasis is given on the need to incorporate more information on the fitness and health in physical education curriculum and stressed the importance of making an effort to acquire the necessary knowledge first.

The education of health knowledge, attitude and behaviour personal appraisal knowledge about human structure has become an integral part of modern health and physical education curriculum in our schools and colleges.

\textsuperscript{24} L. Hendry, School, Sport and Leisure - Three dimensions of Adolescence, (Lea & Feibiger, Philadelphia 1982), p.123.
It helps to (1) indicating areas needing emphasis on the instructional programme; (2) pointing up strengths and weaknesses in teaching procedures; (3) security evidence useful in determining the need for instituting a health instruction programme; (4) determining the proper placement of students in physical and health classes; (5) determining the changes in knowledge attitude and behaviour; (6) reassuring student achievement as a part of the school formal testing programme.\textsuperscript{25}

A more complete picture of individual health will be obtained if we add facts about normal bodily functions, human structure, indication of mental and emotional health, the appearance of the individual and examination of living habits. Health appraisal and present study help to lead to wise decisions.

**Statement of the Problem**

The purpose of this study was to determine and compare the knowledge of human structure, health knowledge and practices among the coaches and Physical Education Teachers.

Delimitations

1. The study was delimited to the coaches and physical education teachers of India.

2. The study was delimited to the coaches who have undergone only a training course of coaching and have not done any physical education training or course. Similarly, the study was delimited to the physical education teachers who have not done any coaching course or training.

Limitations

1. All efforts were made by the research scholar to motivate the subjects to give correct data about their knowledge of human structure, health knowledge and practices but there was no objective measure available to make sure that each subject’s data is correct or not.

2. To assess the knowledge of human structure the Turner's Personal and Community Appraisal form was slightly modified.

3. To assess the health knowledge and practices of physical education teachers and Coaches, the questionnaire made by Singhs was used.

Hypothesis

It was hypothesized that there would be no significant difference between physical education teachers and coaches regarding their knowledge of human structure, health knowledge and practices.
Definitions and Explanation of Terms

"Knowledge refers to pure and simple information imparted calling for exercise of recall, recognition and reproduction"²⁶

Human Structure

The human structure is a very complex multicellular organism. It is not possible for all the cells of the multicellular human animal to be in close contact with the environment. So, in order to survive, specialization of cells has evolved. Functional specialization has taken place in parallel with structural specialization. A cell is the smallest functional unit of an organism Groups of cells which have the same physical characteristics tend to have similar specialized functions are described as tissue. Organs are made of a number of different types of tissue and systems consists of a number of organs and tissues. Each system contributes to one or more of the vital functions of the body.²⁷


Health Knowledge

Health "the state as being hale and sound in body, mind or soul, especially from physical disease or pain".\textsuperscript{28}

Health knowledge was considered as a store of information related to upkeep of body and its poise, if recalled and exercised, gives an individual the capacity for being healthy.

It is also defined as, assured information in matters of health and logical reasoning based on scientific facts involved in it.

Practices

"Repeated performance of an act with the intention of improving or acquiring proficiency in it".\textsuperscript{29}

Practice means the customary action which one pushes with reference to some phase of life. It encompasses the term habit, since habit is also an action but more limited tendency or disposition to action.\textsuperscript{30}


\textsuperscript{29} Encyclopedia Britannica, vol.8, (1971) p.171.

Health Practices

Health practices are way of coping with or satisfying immediate health needs. Health practices are not always consistent, but whether their effect is health enhancing or health compromising, each action is taken deliberately.\textsuperscript{31}

Physical Education Teacher

Physical Education Teacher is a person who guides children, youth, adults in the pursuit of knowledge and skills, to prepare them in the way of democracy and to help them to become happy useful self-supporting citizens by virtue of his knowledge.\textsuperscript{32}

Coach

The coach is a person whose main task is the skill improvement, knowing the finer points of skill in a particular sport is valuable when setting realistic objectives for the team and when passing an useful advice to the player to achieve those objectives.\textsuperscript{33}


\textsuperscript{32} Eark F.Zeigler, Physical Education and Sport, An Introduction, University of Western Ontario, Canada, London, 1982, p.23.

\textsuperscript{33} Brain A.Blanksby, The Coach "Physical Education Studies Year 12", (University of Western Australia, Australia 1987), p.43.
Significance of the Study

1. The study would reveal the existing awareness of health knowledge and practices and knowledge about human structure prevalent among the coaches and Physical Education Teachers.

2. The study would provide guidelines to Physical Education Teachers, coaches and health educators for bringing about maximum possible improvement in health knowledge and practices of students and athletes.

3. This kind of study would help the administrators to take necessary steps to popularize the value of healthful living among Physical Education Teachers and Coaches, students and athletes.

4. On the basis of the present study, the Coaches and Physical Education Teachers may be approached for the fullest utilization of the available resources in the process of spreading the ideas of hygienic practices and healthful living among the athletes, players and students.

5. Based on the results of this study recommendations may be made, if necessary, for the modification or addition in the subject matter in order to develop knowledge of human structure, health knowledge and practices among Physical Education Teachers and Coaches.
6. The study would help the Physical Education Teachers and Coaches to understand the importance of knowledge of function and structure of the human body systems, their independence and how they function as a whole and contribute to health status from birth to death.

7. A casual observation of our school going students and many athletes reveals a woeful lack of good body carriage. The study will help Physical Education Teachers and Coaches to note the postural and structural deformities of students/athletes by virtue of their knowledge (which is the proof conducive of evil effect of school life without health and physical activities) and to provide guideline for corrective exercise programme.

8. The findings of the study would reveal whether the subject matter offered in curriculum of physical education and coaching meets the adequate standard of knowledge.

9. The result of the study may help the student to give a positive health practice and to improve standard of living.