

THE ARMED FORCES AS PROMOTER OF HEALTH, WELL-BEING AND PHYSICAL FITNESS OF THE CITIZENS

Capt AGWAY (Nigeria)

INTRODUCTION

1. The Armed Forces by nature of their duties requires health and physical fitness as the basic tools of their profession. To jump trenches, haul grenades, carry ammunition, swim across rivers, run long distance and climb barriers, health and physical fitness become inseparable and mandatory requirements. During training of military men, a lot of attention is given to numerous physical activities from obstacle course, and drills to sporting activities. These activities promote physical fitness and maintain health.
2. The military creates the necessary atmosphere, provides the facilities and qualified and dedicated manpower to perpetuate the culture of physical fitness and healthful living of military personnel. It is no wonder then that in many countries there are many military sportsmen who represent their nations in national and international competitions. In Nigeria, the military has produced as well national as international sportsmen and women. Since the military does not live in isolation, other citizens take cue from the organised activities and way of life of the military. It is on records that the military after the Second World Wars influenced the citizens to participate in physical fitness exercises and some isolated sprouting activities.
3. What then is physical fitness, well-being and health? The word physical refers to the body, and this is often used in reference to various bodily characteristics including physical appearance, physical strength, physical health, physical development, physical prowess etc. It refers to the body as distinct of the mind. Fitness in itself refers to the quality of all the characteristics referred above. Physical fitness therefore is the ability to carry out daily tasks with vigour and alertness, without undue fatigue, and with ample energy to enjoy leisure - time pursuits and to met unforeseen emergencies.
4. Well-being is a condition of personal ability to enjoy life more abundantly; it is a condition of personal fulfilment and positive feeling of goodness. Health on the other hand is a condition of organic efficiency. The World Health Organisation (WHO) defines health as follows: « Health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity ».
5. With all these definitions at the back of our minds, the stage is set to look at the Armed Forces as promoter of health, well-being and physical fitness of the citizens. The Armed Forces is part of the larger society and need not be treated in isolation. Most often than not the activities of the military often influence the society. The military all over the world has a minimum physical fitness standard in which young civilians are recruited into the force. Every young man or woman would want to achieve this standard even if he or she is not interested in joining the force. Physical exercise -cross-country racing, athletics competitions, survival swimming, novice boxing and so on are organised on regular basis in the neighbourhood by the military and these tend to influence the youth to participate or cultivate that culture as way of life. This culture invariably becomes infectious to the larger society due to the positive physical and health development of the practitioners.

SPORTS ACTIVITIES IMPROVING PHYSICAL FITNESS

6. There are various sporting activities that directly improve physical fitness. They can be grouped into sports that achieve the following results viz: Muscular strength, muscular endurance, muscular flexibility, agility, speed, balance, co-ordination, muscular power and cardio-respiratory endurance.
- a. **Muscular strength.** Muscular strength is defined as the capacity to exert muscular force against a resistance. Sporting activities such as shot put, wrestling, hammer throw and weight lifting are a few of sporting activities that improve muscular strength. The military engages in these activities as a way of life not primarily to win laurels.
 - b. **Muscular endurance.** Muscular endurance is the ability of a muscle to keep working continuously against a moderate resistance and still resist fatigue. Activities such as cycling, shot put and weight lifting where isolated groups of muscles are put into localised use are exhibitions of muscular endurance.
 - c. **Muscular flexibility.** Muscular flexibility is the range of motion at a particular joint. Two primary sports activities like the tennis, squash racket games fall into this category.
 - d. **Agility.** Agility is the ability to move quickly and effectively in different directions with good body control. In military establishments there are obstacle course where agility is built and used when required in sports like gymnastics, judo etc.
 - e. **Speed.** Speed is the ability to move quickly over a short period of time in a single direction. The speed of a person is related to both his reaction time. Reaction time is the length of time it takes to move after being stimulated to do so, such as the firing of the gun in starting a sprint race. This type of speed is experienced during 100m, 200m, 400m and the sprint relays in sports or athletics competition.
 - f. **Balance.** Balance is the ability to maintain the body equilibrium when one's base or support and centre of gravity are altered. Dynamic balance involves trying to maintain balance while walking on beams. While static balance involves trying to maintain balance while your centre of gravity remains stationery. There are various sports where balance is exhibited such sports like gymnastics, cycling and pole vault.
 - g. **Co-ordination.** Co-ordination is the ability of a person to manipulate his body efficiently and effectively. It involves the harmonious working of all parts of the body like high jump, long jump and triple jump fall into this category.
 - h. **Muscle power.** Muscle power is the ability to perform an explosive effort in the shortest time with the greatest efficiency. It shows a person's ability to propel his own body or some other object rapidly through space. Power is useful in such events as high and log jump, 100 metres dash, jumping to head a soccer ball etc.
 - i. **Cardio-respiratory endurance.** This also called cardio-vascular or circulo-respiratory endurance. Cardio-respiratory endurance involves the whole body through the heart, the blood vessels and the lungs. If it is in good condition, it will show itself in a persons ability to perform an activity or a heavy workload over a long period, such as swimming or long distance running. In these events, the system is taxed to supply extra oxygen needed to continue the activity. The military design their activities primarily to achieve the aforementioned and vigorously participate in sporting activities to maintain physical fitness level.

THE MILITARY IN SPORTING ACTIVITIES

7. The military's primary aim in sporting activities is physical fitness. It may be necessary to briefly describe the effects of world wars on the growth of physical fitness world-wide. Leaders of world powers discovered that physical fitness is a basic requirement of building a strong military. This practice is not only limited to world powers alone, other countries followed suit long time ago, realising that sporting activities is a form of building and maintenance of physical fitness level.
8. It should be realised that sports in the military has been designed to meet the combat activities of the military. In times of war military duties may call for jumping over fences, trenches and small rivers, it may call for throwing of grenades, mortars, bailing out from parachutes, endurance of different sorts, balancing and a host of activities that engages all parts of the body. It is then no wonder that military men do engage in sporting activities primarily as a preparation for war as I believe that the nearest activity to war is sport. In sports you will find courage, patriotism, endurance, energy and the spirit of sportsmanship and in war you will find all these.
9. While is true that sporting activities are used to maintain physical fitness level of officers and men, it is equally true that those who excel in one or more sports events are given the opportunity to prove their mettle. They are encouraged to participate in their nation's sports competitions and also take part in the numerous sports competitions organised by CISM. In the course of these sporting activities and exercises the benefits soon begin to manifest themselves.

THE BENEFITS OF SPORTS ACTIVITIES ON HEALTH AND WELL-BEING

10. The benefits of sports activities on health and well-being cannot be overemphasised in this age of computers. Machines are increasingly being designed to take over most jobs or activities normally handled by man and this creates inactivity. This situation places more importance to sporting activity. The benefits of sports can be enumerated as follows:
 - a. **Sports activities and muscle tone.**

Sport activities in form of exercise can strengthen the muscles and prevent them from atrophy. It is not an exaggeration to postulate that an unexercised muscle gradually loses strength and becomes smaller. More observation of an unused muscle would indicate that the victim would completely lose the ability to contract it. Ordinarily, lifting weight can enhance the strength, size and proper efficiency of some muscles. To reach a maximum enlargement of muscle (hypertrophy) one needs to engage in strenuous exercise for a long period of time.
 - b. **Sports activities and normal fatigue**

Fatigue is the sensation of being tired and is caused by the accumulation of waste products in the tissues at a rate faster than the body dispose of them. Normally, fatigue can come from exertion of muscles from lack of activity. When muscles are fatigued, movements become erratic and irregular and one is more prone to mistakes and accidents. Fatigue can be a treat to one's health and happiness. A well exercised muscle can elude the inherent danger of fatigue more readily than unexercised ones. And muscular fatigue is not limited to a particular age. This is not to say that one should over-exercise one's body or lie down and go asleep immediately after severe

muscular effort, one will wake up sore and stiff because the fatigue products are excreted more slowly and the muscle cells are irritated and poisoned by their presence. This result contrasts with an individual who exercises frequently and showers immediately after. This will help the blood to pick up the fatigue products quickly and carry them away from muscles which they are taken out of the blood by kidneys and finally removed from the body.

c. Sports activities and cardiac functioning

It is an axiom that the body is built to be active. To do this however, it has to be exercised during such periods of sustained activity, heavy demands are made upon the heart, lung and circulatory system. Several months of such activity results in:

- (1) Increased oxygen - carrying ability of the blood due to an increase in the number of red cells and total blood volume.
- (2) Increase in the number or involvement of more capillaries.
- (3) Greater cardiac efficiency and output which results in a lower pulse rate and more rapid return to a normal pulse rate after sports activity (Linderholm, 1950).

Vigorous sports exercise comes close to being a necessity if the body is to maintain a healthy state. A systematic plan of games, sports dancing and conditioning exercises truly engaged in builds up the endurance of the heart, lungs and muscles, stimulates the liver and kidneys, reduces nervous tension, and creates a satisfying feeling of emotional and social well-being. Engagement in physical exercise and active participation in sports can be able to cure a weak heart for, the more the exercise, the stronger the heart becomes. The exercised heart will undoubtedly have strength and with increased strength the heart pumps more blood with each beat, and it beats fewer times each minute. A person can perform more intense work for less heartbeat than an unfit person. Likewise, as controlled training proceeds, more work can be done for the same pulse rate or the same for a lesser pulse rate. The average person's heart beats 70 - 80 times per minute when resting. With controlled endurance training this can be reduced considerably. Let us take a quick look at the following heart rate chart:

HEART RATE CHART

Serial	Pulse Rate	Untrained Heart	Trained Heart	Differential
(a)	(b)	(c)	(d)	(e)
a	Pulse at rest per minute	74	50	24
b	Pulse at rest per hour	4440	3000	over 1.000
c	Pulse at rest per day	106.560	72.000	over 34.000
d	Pulse at rest per year	38.894.400	26.280.000	over 12 million

d. Sports activities and blood circulation

The impact of sports activities on the blood cannot be over-emphasised. For example, the number and size of blood vessels that carry blood to the body tissues increased with exercise. Dr Cooper (1968) said that this may increase the total volume by much as a quart in some people. Also with physical exercise more blood goes to the muscles, and as the necessity to lose heat increases, more goes to the skin. The movements of muscles and other organs exert a massaging action on the blood and lymph in the capillaries and lymph spaces, and the increased respiration strengthens the suction that pulse the venous blood into the great veins near the heart by the same bellows like action that draws air into the lungs.

This means more efficient delivery of nutrients and oxygen to muscles and other organs, including the brain. It is worthy of note that improved circulation to the brain tends to improve the way we feel.

e. Sports activities and the lungs.

Sports activities involving extended playing of games such as basketball, volleyball, soccer, swimming etc., usually have positive effects on the health of the participants. They improve work of the lungs by increasing their ability to expand more fully, take in more air, and utilise a greater proportion of the oxygen in the inspired air. Warren and Buskirk (1967) were quoted to have stated during moderate and heavy exercise there is an increase in the body temperature. The increase in central temperature, is an added stimulus to the breathing mechanism. Also Campbell (1932) observed that increased ventilation is ordinarily achieved by increased activity of the inspiratory muscles. This leads to increased distension of the lungs and chest wall and greater elastic recoil during expiration. The rate of breathing which is about 14 breaths per minute when a person is at rest, may be doubled with regular exercise. As a result of the increase in depth and rate of breathing, the air intake may increase from 50 to 100 litres per minute in contrast to a resting intake of 5 to 8 litres.

f. Sports activities and digestion

Sports activity is not without its effect on digestion. It is a rule of thumb that strenuous physical exercise cause a decrease in gastric (stomach) secretions while moderate exercise has little effect on those secretions. Digestion itself is aided by the increased peristalsis produced by the churning activities of the internal organs and by the increased use of the abdominal muscles. When these muscles are properly exercised and are strong, they give good body contour and aid in digestion and in the elimination of waste. Also contractions of the stomach increase during reasonable vigorous exercise but exhausting exercise tops this activity. Campbell noted that those people who exercise to reduce their weight may even find solace in the news that strenuous exercise resulting in perspiration before meal tend to inhibit appetite. But the best benefit of those who eat too little or have little desire for nourishing food, can be derived from mild to moderate exercise because appetite is stimulated by such engagements. Digestion is aided generally by mild exercise such as walking, cycling few minutes after the meal.

g; Sports activities and overweight

Overweight by dictionary definition is excess of weight above what is normal or legal. Overweight can create terrible health problems and if not controlled can lead to death. A solution to the problem of overweight can be found in two factors - dietary and sporting habits. Research has proven that exercise is probably the most efficient way to lose weight and that it also results in weight loss of permanent nature. It must be noted that to exercise efficiently and make substantial progress requires work and sweat. It is important the individual willing to control his or her weight limits himself or herself to 3 or 4 days exercise per week initially and build up to 5 or more days per week, only if he enjoys what he is doing. On the whole, a regular sporting activities contribute to vitality and healthier good looks throughout the middle years. Even such activity improves the female figure by normalising it and causing it to become more proportioned. If the arms or legs are too heavy, exercise works towards slimming; if too thin, exercise develops them.

h. Sports activities as an alternative to drug addiction and other social ills

One of the problems which often confronts man today regardless of social class is insomnia or sleeplessness. A problem to this problem as some people usually think is not to be found in sleeping pills such as sominex-mytol phenobarbitone, sleep easy and mandrax. Rather it is to be derived from participating in physical activities such as volleyball, basketball, soccer, swimming etc. Any person who truly engages in any of the aforementioned games regularly will not only sleep at night but also wake up refreshed the following morning. Also, it is not uncommon at this era to see youths resorting to drugs to relieve them of their stresses, anxieties and tensions. A well selected sporting activity can be a better alternative to drugs. In the military there are various age groups and each of these groups find the activities that suits them.

SPORTS ACTIVITIES RELATED TO DIFFERENT AGE GROUPS

11. All over the world, peoples' characteristics and needs are determined by those of the society in which they live. It is a well known fact that no two human beings are exactly alike. However, many physicians, anthropologists, sociologists and others who have studied human activities have found certain similarities in those of them who are of the same chronological age. Nevertheless it must be remembered that apart from these general similarities, differences in factors like opportunity and experiences, culture, social and economic background, heredity and geographical location also influence people. In listing the characteristics, an attempt has been made to list out only the growth and development characteristics at certain ages in relation to physical performance. The sports instructor should thoroughly understand these general characteristics and plan activities to suit them. The following activities may suit the different age groups:

a. Ages 15 - 17 years

People of this age group have already develop their muscle co-ordination and they are still growing. At this age they are still creating different sorts of physical prowess. A great percentage of them have chosen what sports or games they can do and actually become very proficient in the skills. They can engage in sports like sprinting, jumping, throwing activities as well as participating in football, basketball, racket games etc., generally people of this age adapt to any game because they are versatile and strong.

b. Ages 18 - 34 years

The characteristics of this age group are that their muscles are well developed, motor skills well developed. They have well developed physical prowess and most of them have started to excel in their chosen events. Their load of work is usually increased in this age group and this is the period when greatest achievements are made in physical activities requiring strength, endurance, power and skill.

c. Ages 35 and above

The general characteristics of this age is that of consistency of what they have achieved in younger years. Generally there is a usual deterioration in physical prowess. They are exceptionals at this rule especially in certain sports where experience matters a lot like golf, shooting etc. It is common for people in this group to start enjoying recreational activities like walking, jogging, swimming and other events. The exuberance and zeal for competitions continue to dwindle just as well as their endurance and power.

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12. It is a historical fact that military men who returned to their various countries after the World War II introduced physical fitness exercises and some sporting activities like football and volleyball to their neighbourhood. In those days it was physical training (PT) and the activities gained acceptance in most higher schools especially teacher training colleges. This influence continued for a long time and went through modernisation. What we are doing now in form of sports and physical activities are offspring of what the military had introduced after the World War II. This is not to say that there were no physical activities and sports before the World War but what I am saying is that the military brought a form of impetus or movement to those activities.
13. The experience of the World War further re-iterated the need to firmly establish physical fitness as a culture in the Armed Forces. To maintain acceptable physical fitness in the Armed Forces, sporting activities were introduced and developed. Since sports cannot be done in isolation, competitions spread to the citizens and ultimately the standard of sporting activities was enhanced. In many countries military men are called upon to train national teams preparatory to international competitions. The military has always been in the vanguard of healthful living by demonstrating neatness and proper use of leisure time. This practice has in no small measure influenced the citizens to see the military culture of livelihood as the ideal way of life.

CONCLUSIONS

14. Attempts have been made to define health, well-being and physical fitness of the citizens and to point out that the military is part of the society and cannot be treated in isolation. The culture of physical fitness, which enhanced the health and well-being of military personnel invariably influences the way of life of the larger society positively. It was emphasised that sporting activities tend to improve and maintain the physical fitness level of the military personnel. I went ahead to categorise sports into various activities that improve the total organ of a person. While I mentioned that the military's primary aim of participating in sports is not for winning laurels or for the perfection I was quick to mention that sportsmen who excel in one sport or the other are usually encouraged to soar to higher heights. The benefits of sports activities on health and well-being are highlighted and the various sporting activities that can be engaged in by different age groups were explained, detailing the characteristics of each group.

RECOMMENDATION

15. It is strongly recommended that the military should strive to be the pace setters in all matters of physical fitness and sporting activities.

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