

Development of sport for the spinal paralysed (II)

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Standard of performance

With the development of the Stoke Mandeville Games, the standard of performance has increased steadily. The skill attained in some of the team games is quite amazing. This applies, in particular, to wheelchair basketball. This sport has become one of the great attractions of the Stoke Mandeville Games and has provided not only great excitement and satisfaction for the players but also considerable enjoyment for thousands of able-bodied spectators who tend to forget in the heat of the game that the players are

some of the most severely disabled sportsmen ever to enter the field. Wheelchair basketball brings into play all the different adjustment forces in the neuromuscular systems of paralysed people and promotes that high degree of integration resulting in complete mastery of the wheelchair. Actually, the player and his wheelchair become one entity like the polo player and his mount. Above all, it is a sport which demands from every player the highest degree of self-discipline and sportsmanship. The rules are adapted from conventional basketball associations. In this sport the paralysed player is superior to the able-bodied competitor. His advantage is the very paralysis of his legs; he can bring

¹ See "Olympic Review" since the No. 111.

into full play the concentrated dexterity of his arms, hands and trunk muscles. In manipulating the wheelchair and trying to catch the ball, the able-bodied player tends to move his legs reflexly, thus losing his balance and tending to fall out of the chair. This was seen again and again when paralysed teams competed with able-bodied sportsmen, however skilled in their own sport.

Another example of high standard performance is weightlifting. There are six weight classes ranging from lightweight to heavyweight. An electrocardiogram is obligatory for each entrant. This is a sport where records are broken continuously, and our world record in the heavyweight class is at present 240 kg.

One of the first competitive sports introduced at Stoke Mandeville was archery, which has

become a very popular sport among paraplegics and even tetraplegics all over the world. Indeed, it is an ideal sport for such severely disabled people and is superior to pistol and rifle shooting from various points of view:

Firstly, during clinical sport in hospital it complements routine physiotherapy in promoting an upright position in the paralysed and developing the strength of the arm and trunk muscles. This applies particularly to patients with transections of the spinal cord at higher thoracic and cervical levels. It is obvious that it is more interesting for the paralysed to shoot arrows with an increasing pull-weight of the bow than to work monotonously on pulleys in the physiotherapy department. *Secondly*, it has a beneficial effect on the respiratory and cardiovascular function in high thoracic and, especially, in cervical lesions. *Thirdly*, it offers great



variety in application as exercise can be intensified by increasing the pull-weight of the bow and shooting greater distances. *Fourthly*, the paraplegic can compete with able-bodied archers on even terms. Numerous paraplegics have gained the FITA Star, scoring over 1,000 points when shooting 36 arrows at 90, 70, 50 and 30 m. each for men and the same number of arrows at 70, 60, 50 and 30 m. for ladies with pull-weights varying from 16.5 to 19 kg.

In swimming the standard of performance has also improved. Moreover, paraplegics have shown interest in training in underwater diving with snorkel or aqualung equipment. Although even tetraplegics have been successful in this sport (naturally accompanied by an able-bodied diver), from a medical point of view it should not be carried out by paraplegics with injuries above the fifth thoracic segment because of absent or greatly diminished vasomotor control occasioned by interruption of the splanchnic innervation in these people.

Aims of the Stoke Mandeville Games—a movement of peace and understanding among nations

Through international sport, the paralysed athletes have achieved a mutual understanding in accordance with the ideals of the Games. As with the able-bodied, the will to win is always strong in national and international contests, but exaggerated nationalism and racial unrest, from which the Olympic Games have suffered greatly in recent years, is not allowed to develop. The Games have become a movement for peace.

Offshoots of the Stoke Mandeville Games

The enthusiasm and skill of the wheelchair athletes has led to the development of other international sports events for the paralysed. Equivalent of the British Commonwealth Games of the able-bodied have been the British Commonwealth Paraplegic Games founded in 1960 and the Pan-American Games, founded in 1967. When the Paraplegic Games started 27 years ago, who would have thought that one day paraplegics and even tetraplegics from all parts of the

world would fly as sportsmen and sports-women in their own right 10,000 miles and more to represent their countries in international sports festivals!

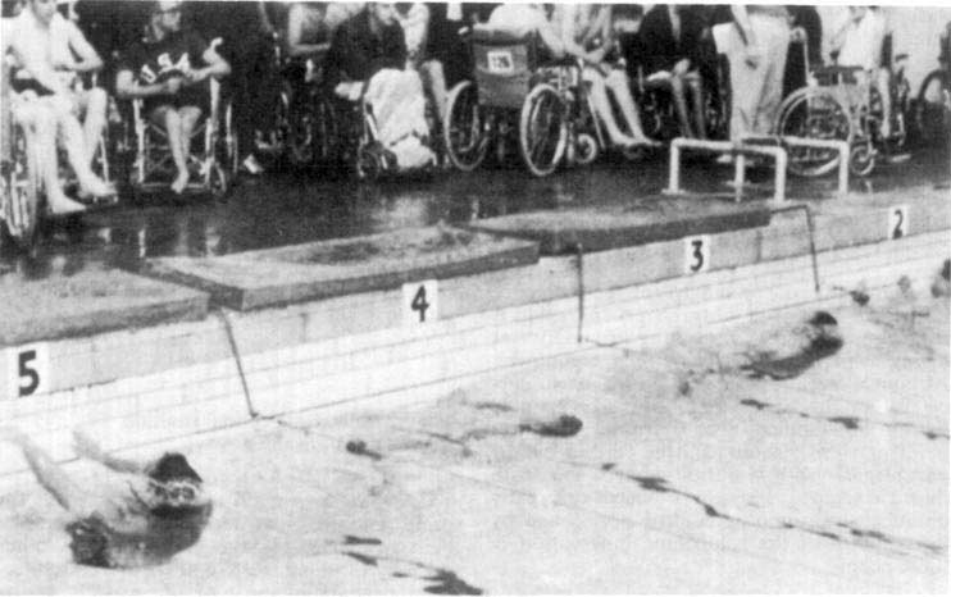
This unique sports movement has even found recognition by sports organisations of the able-bodied, and it was in 1956, on the occasion of the Olympic Games in Melbourne, that the International Olympic Committee awarded the Fearnley Cup to the International Stoke Mandeville Games Federation for outstanding achievement in the service of the Olympic ideals.

The world's first sports stadium for the multi-disabled

There were two main reasons why I felt for some time the great need of a sports stadium built primarily for the paralysed and other severely disabled. *Firstly*, there were architectural barriers in most of the existing sports stadia and swimming pools. Access to these centres is difficult if not altogether impossible, especially for wheelchair users, because of the many steps and stairs as well as the lack of lifts. Bound up with this was the inaccessibility of toilets for wheelchair users. Unless there are negotiable ramps, the severely disabled have to rely on the assistance of able-bodied helpers, which to most of them is embarrassing as this immediately deprives them of their independence.

Secondly, there was the existing psychological barrier. This is the prejudice, so deeply ingrained in society for centuries, that sporting activities of the severely disabled constitute an embarrassment to the able-bodied. Yet the many severely disabled fully employed today in industry are considered equal citizens when it comes to paying income tax! So much for segregation. For they still have to fight for proper sports facilities despite recent improvement in the United Kingdom and some other countries.

The Executive Committee of the British Paraplegic Sports Society decided in 1968 to build a sports stadium primarily for the paralysed and any other physically or mentally disabled; but at the same time its doors would be open to certain sections of the able-bodied community in order to



promote a better understanding between the able-bodied and their disabled fellowmen.

The sports stadium for the paralysed and other disabled was built within one year and was opened by H. M. Queen Elizabeth II on 2nd August 1969. The sports centre has, of course, been designed to be completely accessible to all kinds of disabled whether ambulant or in wheelchairs. It comprises a very large sports hall for games such as basketball, volleyball, badminton, tennis, etc.

There are smaller halls for fencing, table tennis, snooker, weightlifting, a ten-pin bowling alley, a 25 metre heated Olympic swimming pool with continuously circulating water, and a large dining hall for 250 wheelchair users. Spectator stands for both the main hall and the swimming pool are included. The stadium has, of course, the required changing rooms and toilet facilities suitable for all types of disabled, in particular wheelchair users. There is a large lift for wheelchair users for access to the table tennis room and coffee bar on the first floor.

Moreover, an indoor bowls centre, one of the largest in Great Britain, was recently built and opened in September 1974 when demonstrations of bowling contests were given by paraplegics, amputees, blind and able-bodied.

An accommodation block for a further 150 beds at the stadium has also been built.

The Stoke Mandeville Sports Stadium has proved how great a part sport can play in the social reintegration of the disabled into the community. Other countries have followed our example. There is a magnificent sports stadium for the disabled in Osaka, Japan, opened in 1974, and also excellent sports facilities for indoor and outdoor pursuits in the new Paraplegic Rehabilitation Hospital (200 beds) opened in the autumn of 1974 in Toledo, Spain.

The effect of the *Stoke Mandeville Games* on society could not have been better expressed than by the late Pope John XXIII in his audience accorded to the wheelchair athletes and their escorts after the World Games for the Paralysed in Rome: *"You are the living demonstration of the marvels of the virtue of energy. You have set a great example which we would like to emphasise, because it can be a lead to all. You have shown what one energetic soul can achieve in spite of apparently insurmountable obstacles imposed by the body."*

L. G.

