The Special Olympic Games for the mentally handicapped – United Kingdom 1989

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Chief Medical Officer to the Games

The games took place in the City of Leicester in August 1989. Over 1,500 mentally handicapped competitors took part, many of whom had severe physical handicaps as well. There were 14 different classes of competition, held in seven separate venues, as well as ceremonies and recreational activities. A medical team of over 100 doctors, nurses and physiotherapists, mostly part-time volunteers, was formed to service the seven medical posts.

As it may be of interest to doctors and others involved in any such games in the future, details are given of conditions recorded in pre-games medical examinations, of injuries and other medical conditions treated by the medical team, and some details of the administration and equipping of the medical services. Although the main responsibility of the medical team was to the competitors, many coaches, officials, escorts and a few spectators were also treated.

Keywords: Mental handicap, physical handicap, Special Olympic games, medical examination, first aid

Introduction

Until recently, the participation of the mentally handicapped in any form of competitive sport has been very limited. However, some games, along Olympic lines, were introduced in Chicago, USA in 1968. One thousand mentally handicapped people from all over the United States of America, Canada and France took part in a meeting involving many sports, sometimes modified to suit their special needs, but generally under the rules of the respective international governing bodies of sport. In later years some competitors from the United Kingdom participated in games in the USA where events were held both nationally and in many states.

In the United Kingdom some 7 years ago, meetings for the mentally handicapped were initiated on a local and regional basis, and later national games took place in Merseyside in 1982 and Brighton in 1986. The City of Leicester was the venue for a more comprehensive games in 1989 in which over 1,500 competitors, all requiring escorts, participated over the course of a week in 14 events held in seven separate venues throughout the city. There were 18 regional teams from the UK and teams from France and Germany.

The author, who holds a clinical assistant appointment in mental handicap and has an extensive interest in sport medicine, was asked to act as honorary chief medical officer for the games. He had the responsibility for recruiting a team of doctors, nurses and physiotherapists and establishing seven separate medical centres by borrowing, begging or even buying supplies, equipment and medication. The medical histories, current medication and special requirements of each competitor had to be perused and the data entered by hand on to cards to be carried by the competitors or their escorts at all times. In practice, the cards were often forgotten.

Pre-games medical examination

Pre-games medical examinations were carried out by the competitors’ own general practitioners, by community physicians or by specialists in mental subnormality. For most, this was done gratis or for a nominal fee, though in a few cases a fee of £100 was quoted. The thoroughness with which these examinations were carried out was very variable, sometimes cursory, sometimes meticulous and sometimes with only a statement ‘I do not see why this person should not participate’.

Details were requested of any significant physical or psychological condition, state of tetanus immunization, routine medication and allergies. With sufferers from Down’s syndrome, there is a risk of atlanto-axial instability, and so radiological examination of the cervical spine was requested to eliminate risks of spinal cord injury in such activities as diving, gymnastics with neck flexion, or risks of falling from gymnastic apparatus or from fast moving horses. The association of Down’s syndrome with congenital heart lesions was also noted.

A summary of pre-games data is given in Table 1.
Table 1. Conditions recorded at pre-games medical examinations on 1512 competitors (942 male, 570 female)

<table>
<thead>
<tr>
<th>Down's syndrome</th>
<th>Atlanto-axial instability:</th>
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<tbody>
<tr>
<td>Present - confirmed by X-ray</td>
<td>24</td>
</tr>
<tr>
<td>Absent - confirmed by X-ray</td>
<td>312</td>
</tr>
<tr>
<td>Not X-rayed</td>
<td>81</td>
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<tr>
<td>Total - Down's syndrome</td>
<td>417</td>
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<thead>
<tr>
<th>Epilepsy</th>
<th>Receiving treatment:</th>
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<tbody>
<tr>
<td>Grand mal</td>
<td>126</td>
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<td>Petit mal</td>
<td>24</td>
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<tr>
<td>Temporal lobe</td>
<td>17</td>
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<tr>
<td>Total - current treatment</td>
<td>167</td>
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<table>
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<tr>
<th>Past history - not on treatment now 72</th>
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<tr>
<td>Other conditions</td>
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Tetanus immunization within past three years | 498 (33%) |
Women taking contraceptive pill | 41 (7%) |
(mostly for menstrual regulation)

In addition to the competitive events were several optional activities such as canoeing, simple rock-climbing and roller skating. There were also social activities including dancing and a pop concert. These were enjoyed by them all until the group invited some of the audience to come on to the stage where the crowding, noise and stroboscopic lights had their effects, especially on the epileptics.

The opening ceremony with a parade of competitors was conducted according to Olympic protocol but there was more emphasis on demonstrations by groups supporting the handicapped – dance displays, military and civilian brass bands, the release of balloons and fireworks and hoisting the flag. The ceremony, with the usual speeches and administration of the oath and lighting the torch, took place on the Leicester Tigers' rugby football ground before a capacity crowd. There were many minor casualties, largely through heat exhaustion as both this ceremony and the following week were in heatwave conditions.

Midway through the games there was a firework display open to the general public, but a change of wind direction led to rockets exploding over the crowd and accounted for many minor eye injuries. The closing ceremony was marred by heavy rain, and was terminated early though unfortunately the transport was booked for the expected closing time. This resulted in many competitors becoming very wet and tired before reaching their accommodation. They departed to their own homes soon afterwards, so the medical team were not involved in any sequelae from the exposure.

Except for a few who lived in the City of Leicester, all competitors were accommodated in the halls of residence of the university and polytechnic. Out-of-hours emergencies were treated by the university health service whose sick bay was made available for those who needed it but were not ill enough to justify hospital admission.

Competitive, recreational and social events

Many of the usual Olympic events were included, but with some adaptations for the handicapped, though basically they remained under the rules of the relevant governing bodies. Most of the track and field events were included except for those involving discus or javelin and runs exceeding 3,000 metres. Running speeds and jumping distances were of course slower than normal county standard, but were still of high quality. The standard of gymnastics would have been a credit to many schools, as would soccer, basketball, table tennis and netball.

Cycling was performed under special regulations suited to the skills of the competitors, as were equestrian events in which competitors were graded, the novice group being led and sometimes supported, while some easy and low jumps were provided for the advanced group. In swimming events, Down's syndrome sufferers started all races from the water as a precaution against atlanto-axial instability. Lawn bowls was high 'village club' standard.

Administration of the medical team

Appeals for volunteers to help in all aspects of the games were sent out in the press. Many people responded, including some doctors, nurses and physiotherapists. The secretary of the local branch of the British Medical Association sent out a more detailed appeal to Leicestershire doctors. Apart from the author (a retired general practitioner), a registrar and a senior house officer in mental handicap who were able to obtain a week's leave to help with the games and work full time, other doctors were only available for one or two half day sessions, mostly at the weekend when there was little competition. None of the regional or foreign teams brought their own doctor or physiotherapist.

The superintendent physiotherapist for mental handicap recruited colleagues at various meetings and obtained leave for most of her own department for the duration of the games. One chartered physiotherapist was placed in administrative charge of each of five medical posts, doctors working full-time being in charge of the other two. A doctor,
The Special Olympic Games for the mentally handicapped: H.E. Robson

a. Entry of team from Fife at opening ceremony (Credit: Olga Harris)

b. Tessa Sanderson opening the games (Credit: Special Olympic Games, Leicester)

c. Medical team outside their tent (equestrian events) (Credit: H.E. Robson)

d. Netball (Credit: Special Olympic Games, Leicester)
The Special Olympic Games for the mentally handicapped: H.E. Robson

e. Equestrian class bending event (Credit: Special Olympic Games, Leicester)
f. Beginners equestrian events (Credit: H.E. Robson)
g. Advanced equestrian events (Credit: H.E. Robson)
h. 100 metres sprint (Credit: Special Olympic Games, Leicester)
i. Demonstration of dance (Credit: Special Olympic Games, Leicester)
j. 'Look, no hands' – no legs either, but a good swimmer) (Credit: Special Olympic Games, Leicester)
k. Weightlifting (Credit: Special Olympic Games, Leicester)
Abdominal conditions provided a Table 2. admitted
Skin and heat exhaustion
Psychiatric (all
diarrhoea
Eye
Skin grazes,
and muscle
sunburn
Fixtures
Clenfield Hospital pharmacy in Leicester provided a padlocked drug box with all medications likely to be needed in emergency for each of the
seven sites and special prescription forms valid in
dospital pharmacies were printed and suture packs
were provided through the sterile supply department.
LRI. All these were on a ‘use or return’ basis.
Some drugs, appliances and dressings were donated
by pharmaceutical manufacturers. Couches, trolleys
and physiotherapy equipment were secured on loan.
The St John Ambulance Brigade were responsible
mainly for injury and illness to the spectators, though
they did treat a few competitors. Likewise, the games
medical team treated a few members of the public
though their main responsibility was to the competi-
tors, coaches, escorts and officials.
Half way through the games, the author was
admitted to a coronary care unit and his clinical
duties were taken over by the registrar in mental
handicap, Dr Peter Purber. The administration of
the team was then managed with great efficiency by the
field ambulance records sergeant, Peter Banks.

Facilities
The main medical centre comprised two small
Portakabins, one as the principal physiotherapy
department and the other a consulting/treatment
room and the office. A secure box for drugs was
installed and a lockable cupboard for dressings and
records was provided. The cabins were locked at
night and the area patrolled by a security firm. Four
other centres were established in the medical rooms
of gymnasia, sports halls and swimming pool, and
tents for the remaining two sites.
The medical team was only a part of the whole
games organization for which a radio telephone
network, also run by volunteers, was provided and
worked efficiently. Evacuation of casualties was
carried out by the TA ambulance, by St John
Ambulance cars, by private car and, on occasion, by
the county ambulance service. The accident and
emergency department of the Leicester Royal Infir-
mary treated suspected fractures and investigated or
admitted medical emergencies which were few.
The Glenfield Hospital pharmacy in Leicester
provided a padlocked drug box with all medications
likely to be needed in emergency for each of the
competitors and non-competitors – officials, coaches,
escorts, helpers and a few spectators – treated by the
medical team during the games from their arrival in
the city until their departure for their home regions.
No attempt has been made to differentiate between
injury or illness during actual events and those
occurring during training, recreation or participation
in such fun events as the pop concert or the fireworks
display.
It has been suggested by McCormick et al. that
illness and injury were three times as frequent
amongst Down’s syndrome sufferers than those with
other mental handicaps. They analysed the actual
duration of each activity which we did not. Our own

<table>
<thead>
<tr>
<th>Competitor</th>
<th>Non-competitor</th>
<th>Total</th>
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<tbody>
<tr>
<td>Knee, back and other orthopaedic conditions</td>
<td>42</td>
<td>24</td>
</tr>
<tr>
<td>Skin grazes, sunburn</td>
<td>34</td>
<td>8</td>
</tr>
<tr>
<td>Ankle and foot injuries</td>
<td>29</td>
<td>11</td>
</tr>
<tr>
<td>Syncope and heat exhaustion</td>
<td>22</td>
<td>16</td>
</tr>
<tr>
<td>Bruising and muscle strains</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Eye conditions including FBs</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Coryza, otalgia, pharyngitis</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Abdominal conditions including dysmenorrhea</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Skin lacerations and foreign bodies</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Epileptic convulsions</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Psychiatric (all counselling sessions for one games official)</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Asthma and chest infections</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Hypertension</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Diabetic complications</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

196 | 117 | 313 |
experience did not show a similar trend, though of course, our analysis was made in a different way and so was not directly comparable (Table 3).

In both competitors and non-competitors, injuries to bones and joints were the most frequent conditions requiring treatment, followed by skin lesions, especially sunburn, then simple syncope and heat exhaustion. Many false alarms were given by officials and helpers as the mentally handicapped, if feeling tired very sensibly just lie down, whether this takes place in a concert hall, track, dining hall or changing room.

The two most hazardous activities were watching rockets bursting overhead during the fireworks display, and diving from a height on to inflated balloons in the Olympic amusement park. After a few neck injuries were treated, the doctor in charge of the main medical centre had this apparatus closed down.

A total of ten patients were referred to hospital and two were admitted, one for status asthmaticus and one for investigation of an acute abdomen. There were no severe injuries or life-threatening illnesses.

Discussion
As in any major sporting event, full medical cover was advisable during competition in each venue where risk could be anticipated. In each of the seven venues for the 5 days of competition there was a team consisting of a doctor, one or two physiotherapists and a nurse (for one session only, there was a senior medical student, assisted by a very experienced nurse.) Cover was given for the opening ceremony, the official reception, the pop concert, the fireworks display and the closing ceremony by the medical team. Such low risk activities as a cinema show, visits to factories and the zoo were not covered, neither was lawn bowls and some recreational activities although the university health service was on stand-by duty out of working hours.

Most of the time on duty was inactive but not boring as the teams were able to watch the events taking place. As John Milton wrote in On His Blindness (1670) ‘They also serve who only stand and wait’. There were few epileptic fits to be treated than were anticipated, and the only psychiatric emergency requiring five long counselling sessions occurred in one of the games organizers.

Surprisingly, only three cases of diarrhoea were reported, despite sandwich lunches and numerous ice cream and snack stalls. In view of the hot weather, the organizers wisely banned meat from the sandwiches as no refrigerated vehicles were available for delivery.

Muscle injuries and bruising were few. Foot and ankle injuries were as expected, fairly common, as were injuries to the knees and back. There were only two circulatory disorders, both transient hypertension, despite the 78 competitors who had or have cardiac lesions, mostly Down’s syndrome people with septal defects.

Few emergencies, none serious, occurred in the swimming pool, but an anaesthetist with resuscitation equipment was present at each session. The main role for the physiotherapists and nurses in the pool was assisting the physically handicapped in and out of the water.

Evening physiotherapy sessions were arranged in the main medical centre for all follow-up treatments but this facility was not used very extensively.

Morale within the medical team was very high. All worked with enthusiasm and with understanding of the problems of the handicapped. All competitors were mentally handicapped, but many had severe physical handicaps in addition. Doctors did not consider it below their dignity to sweep out and clean the various medical centres. Food was provided for competitors and helpers from vans which supplied packed lunches, or for those working late, an evening snack as well. As all the medical posts had mains electricity supplied, coffee could be made or drinks obtained from the many stalls at all venues.

The medical team played their part in contributing to the success of the games and enabling each competitor to carry out the spirit of the special Olympic oath: ‘Let me win, but if I cannot win, let me be brave in the attempt’.

Reference

Acknowledgements
Well over one hundred people helped to organize and run the medical team but a few justify special mention. In alphabetical order:
Sgt Peter Banks, RAMC, 222 Field Ambulance TA
Ms Jenny Barnes, superintendent physiotherapist, Glenfrith Hospital Unit
Dr Anne Beck, Leicester University student health service, and her colleagues
Dr Peter Furrer, registrar in psychiatry, in charge of the main medical centre and acted as chief medical officer half way through the games.
Mrs Olga Harris, secretary to BASM’s hon. treasurer
Mr Terry Harrison, games director, and his team
Mr Carl Hickinbotham, runner, porter, clerk and general assistant
Leicestershire Health Authority (Chairman – George Farnham, Esq)
Miss Elizabeth Robson, teacher in midwifery, Leicester Royal Infirmary
Dr Sue Stuttard, SHO in psychiatry and gymnastics coach
Miss Jenny Sutcliffe, group pharmacist
3Ms Company, Loughborough, and other companies who supplied material.