THE HEALTH OF ARMY FAMILIES

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General Considerations

In considering a health service for families, one must think of three things, environmental health, general medical care, and special medical care.

Environmental health calls for proper housing, water supply, feeding, sanitation and protection against infectious disease.

General medical care involves the provision of domiciliary and hospital service for minor and major illness.

Special medical care covers the vulnerable groups, i.e. the mother during the antenatal stage, during her confinement, and during the post-natal period, the child, during the neonatal period, during infancy, before and during school, the elderly, and the chronic sick.

In the United Kingdom, under the provisions of the National Health Service Act, general medical care of families is provided by the general practitioner and hospital services. Special medical care is provided as follows: For the mother, antenatal care involves routine medical examination by the family doctor or midwife, at hospital or clinic, with home visiting if required. Confinement takes place either in the home or in hospital. The services of doctor, midwife and consultant are available, also laboratory facilities and transport. During the post natal phase routine medical examinations are made either at home or at the clinic, and complications following parturition are treated either at home or in hospital, a consultant’s services being available as required.

The child during its first year receives advice and systematic treatment at the baby clinic, and also can be given protection against certain infectious diseases. From the age of 1 year clinic attendance and home visitation continue up to school age. Day nurseries and nursery schools are provided which are under medical supervision, and require to conform to certain standards of hygiene.

During school age, the school health service provides routine periodic medical and dental inspection, special examination where indicated, facilities for referral to specialists, a clinic for treatment of minor ailments, follow up of defects, remedial treatment of physical deformities, general health supervision, covering school meals and physical education, and the provision of special schools or classes for handicapped children.

School leavers are examined for assessment as to their fitness for future employment.

For the elderly a geriatric service is provided.

Environmental health is under the supervision of the local health authority, which holds certain statutory powers in relation to housing, water supply, sanitation, waste disposal, and supervision of food supplies.

With improved conditions of service over the past few years, there has been a very considerable increase in both marriage and reproduction within the army. Over the past ten years the composition of the military population has changed considerably.
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and the present pattern is likely to continue. For example, in 1954 the total military population consisted of 68% soldiers, 12% wives, and 20% children. In 1964 it consists of 46% soldiers, 21% wives, and 33% children. In other words, families now constitute over half of the population for which the RAMC is medically responsible. It is of interest to note that half the children below the age of fifteen are under the age of five, so that, together with a high proportion of young mothers, there is a comparatively large vulnerable group.

Army families

**TABLE I**

The Military Population (approximate strengths)

<table>
<thead>
<tr>
<th></th>
<th>1954</th>
<th>1964</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Per Cent</td>
</tr>
<tr>
<td>British Army Military Personnel</td>
<td>446,000</td>
<td>68</td>
</tr>
<tr>
<td>Wives</td>
<td>82,000*</td>
<td>12</td>
</tr>
<tr>
<td>Children†</td>
<td>131,000*</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>659,000</td>
<td>100</td>
</tr>
</tbody>
</table>

*—Wives and children of NS men are excluded
†—Estimate of children based on 1.6 per family

**TABLE II**

Children of Army Families by Age Groups—31st August, 1962

Based on a survey covering 89% of Officers and 93% of Other Ranks

<table>
<thead>
<tr>
<th>Age</th>
<th>Officers' Children</th>
<th>O.Rs' Children</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–</td>
<td>6,817</td>
<td>50,252</td>
<td>57,069</td>
</tr>
<tr>
<td>5–</td>
<td>6,112</td>
<td>29,221</td>
<td>35,333</td>
</tr>
<tr>
<td>10–</td>
<td>5,997</td>
<td>15,413</td>
<td>21,410</td>
</tr>
<tr>
<td>15–18</td>
<td>3,152</td>
<td>4,887</td>
<td>8,039</td>
</tr>
<tr>
<td>Total</td>
<td>22,078</td>
<td>99,773</td>
<td>121,851</td>
</tr>
</tbody>
</table>

As far as general medical care is concerned, it is again interesting to compare hospital admission figures. Those for Overseas Theatres are used to give an accurate comparison. Whereas in 1955 76% of hospital admissions were soldiers and 24% members of families, in 1963 the proportions were 48% soldiers and 52% families.

The Army doctor's responsibility is now equally divided between troops and families, and, in view of their vulnerability, the latter are likely to make greater demands on his time.

**Environmental Health**

Environmental health requires active supervision by the medical services.

The provision of army quarters and the careful selection of army hirings cover the essential requirements of housing. In comparison with the civil population, the army
is generally better housed. However, with the existing shortage of quarters, sub-standard accommodation, such as caravans, private dwellings, and hotel rooms, has to be used and here proper supervision is needed.

There must be an adequate and pure supply of drinking water. There must be proper facilities for washing and laundry, particularly where small children and babies are involved. There must be adequate cooking arrangements. There must be indoor sanitation. There must not be overcrowding. The initial joys of reunion are often rapidly swamped by the inadequacy and squalor of private accommodation, so it often pays to hold up a family’s move until they have got somewhere worthwhile to live.

Climate is another point to consider. This might well differ from that to which the family has been accustomed in the United Kingdom. Generally, families settle down well to a hot climate and soon adapt themselves to the local way of living. Some children however are affected by prickly heat, sunburn, and possibly otitis externa from too much swimming, and families should be warned of such hazards beforehand.

With regard to endemic disease, families must be warned before they leave the United Kingdom of the need to have all members routinely protected against smallpox, diphtheria, poliomyelitis, enteric fever and tetanus. It is not often realised that, whereas at home these diseases have become relatively uncommon, they still present a very definite risk abroad. They should also be fully informed on malaria prophylaxis and prevention of heat illness. Once the family has settled in an overseas station there is little needed, apart from helpful supervision by medical officers and SSAFA sisters, to keep them in good trim.

The social environment of an overseas station is often vastly different from that at home. For the first time in her life a young mother finds she has help in the home and time on her hands, which can lead to boredom. The surroundings are unfamiliar, language and social customs are not understood, and she has not the close contact of relatives and old friends. This inclines her to put a lot of reliance on the medical services for the solution of her problems, which are often minor and would no doubt normally be dealt with by her mother. This means a lot of extra calls on the family doctor’s time, and, if the woman is poor at adapting herself to new and strange surroundings, can lead to anxiety, worry, a desire to get home at any cost, with consequently more work for the psychiatrist. Social problems are best solved outside the medical sphere. The early acquisition of a quarter surrounded by other army families of similar interests and outlook, handy for the NAAFI, the school, and other social amenities will help considerably, and it goes without saying that these problems are at their worst in areas where quarters are short.

In order to help families to meet these problems when moving overseas a booklet is issued, A Guide to Families Proceeding Overseas, which gives a lot of detail covering all aspects of the move. This should set the mind at rest over administrative details. It also summarises very adequately the medical requirements. Provided therefore this booklet is read and understood, there should be little if any trouble. However in the excitement of the move this might well be overlooked, and inevitable muddles result.
The medical cover provided for army families overseas is comprehensive in that it provides a general practitioner service with consulting room and domiciliary visiting facilities, out-patient and in-patient facilities, and preventive medicine all under a unified control.

In his work, the Army GP overseas is assisted by a SSAFA Sister who combines the duties of health visitor, school nurse, and to a large extent welfare officer.

The present system of organising in large garrisons a group practice, with several medical officers under a senior medical officer, helps considerably to co-ordinate all aspects of medical cover.

**Special Medical Care**

Army families provide a large vulnerable group.

For the mother, the army makes provision for ante-natal care, confinement and post-natal care. This is normally organised by the obstetrician of a military hospital. Expectant mothers either attend as hospital out-patients if living close at hand or attend medical centres in the more remote places which are visited by the obstetrician and midwife. In such circumstances the SSAFA sister and families doctor normally assist.

Expectant mothers are admitted routinely to hospital for confinement, as domiciliary midwifery is not considered either practicable or necessary. Only in emergency are babies ever delivered outside hospital.

Post-natal follow up of the mother and child takes place after confinement either in hospital or in the medical centre.

Infant welfare clinics are run as part of the family health service, and are generally conducted by the SSAFA Sister, with the families' doctor on hand to give inoculations and advice where necessary. It is the aim to protect all children routinely against smallpox, diphtheria, whooping cough, tetanus and poliomyelitis, and against tuberculosis by BCG vaccination when indicated. Advice is given on feeding, development, and general health.

A school health service is conducted in overseas garrisons based on the lines of that organised by Local Education Authorities at home. A medical officer has one or possibly two schools under his charge, for general hygiene supervision and the conduct of routine and special medical examinations of the children. A system of selective examination has been recently introduced in BAOR to accord with the modern trend in the United Kingdom school health service. Children are now given a full examination on entry to school, irrespective of age, and during their last year in school. The intermediate examinations at the ages of 8 and 11 are to be discontinued as a routine, but any child who in the opinion of the parent, teacher, school doctor or SSAFA Sister, is not making satisfactory progress in school, or who shows any signs of abnormality, will be examined as a special case at the earliest opportunity. Owing to its importance, vision will continue to be tested routinely at the ages of 5 and 11. The school doctor is encouraged to make regular visits to the school to see the children in class, in the gymnasium, at play and at meals, in order to assess their general standards of mental and physical health with the teachers, to pick out any
The number of army sponsored schools covered by this service is at present 123
with a total attendance of 32,900. It is of interest to note that during the last six months
there has been an increase in attendance of 1,400.

As a result of school medical examinations about six per cent of the children,
chiefly in the lower age groups, are referred for specialist examinations, most commonly
with visual, ENT and orthopaedic defects. Evidence of mental subnormality arises
usually as a result of lack of educational progress, and again leads to specialist referral.

Dental examinations are similarly conducted. These show that between 60 and
70 per cent of the children require treatment.

**Handicaps**

With our increasing child population we are becoming concerned with the
incidence of handicaps.

It has been observed that during the last 15 to 20 years there has been a steep
decline in mortality rate in infancy and early childhood, accompanied by a rising
survival rate of immature, malformed, birth injured and frail babies. At a rough
estimate, 1 in every 100 who survives the hazards of the pre-natal period will later
need special care, treatment and parental guidance for a severely handicapping
condition.

**TABLE III**

| Handicapped Children on the Register of the Institute of Army Education |
| (1st May, 1963) |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Blind | 11 | Partially sighted | 5 | Deaf | 6 | Partially deaf | 26 |
| Educationally subnormal | 184 | Epileptic | 3 | Maladjusted | 16 | Physically Handicapped | 56 |
| Speech defect | 4 | Delicate | 2 | Mentally subnormal (ineducable) | 76 | Awaiting classification | 8 |

397

In 1963 there were 397 handicapped children on the register of the Institute of
Army Education, which is roughly 0.3% of the estimated child population. In 1962
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this total was 263, and in 1961, 203. In view of the estimated incidence of handicap, this suggests that the full total has not yet been discovered.

The majority of these—260—are in the category of mentally subnormal of whom 76 are ineducable.

145 have been placed in special schools, 24 in mental institutions, 32 attend day training centres, six receive special home tuition, 23 attend special classes in normal schools and 18 attend normal schools. 61 await places in special schools and the remainder are with their parents overseas, awaiting assessment.

Out of the total only 33 are in the under 5 age group. As this age group comprises about half the total child population it is felt that there are many as yet undetected cases of handicap within it.

It is obviously important that handicap should be detected at the earliest possible stage in childhood. This will facilitate early treatment, education of the parents in coping with the handicap, and special educational treatment to be started at an early age.

In order to save time and reduce the numbers to reasonable proportions these examinations should be confined to certain “at risk” groups, i.e. those with a significant family history of deafness, blindness, etc. or social problems, those with a pre-natal history of maternal rubella or other virus infections; illnesses involving chemotherapy or surgery during pregnancy; those with a perinatal history of prematurity, low birth weight, post maturity, difficult labour or congenital abnormality. Those with a post-natal history of slow development, cerebral palsy, convulsions, meningitis or serious injury; and finally those with symptoms such as inattention to sound and visual stimuli, delayed development, delayed speech, lack of interest in people or playthings, and abnormal social behaviour. Examination should include visual, auditory, and intelligence testing. Such examinations should be conducted by family medical officers with the help of SSAFA Sisters, with reference to specialists where appropriate.

Further Developments

In order to deal with the increasing demands of family care in the army, certain steps have already been taken and further requirements must be considered.

Since 1961, 9 army health specialists have been trained in the ascertainment of mentally handicapped children and this will continue at the rate of 4 per year. The ability to carry out ascertainment in school or home reduces the pressure on psychiatric out-patient departments and saves considerable time.

Routine audiometry, by the provision of portable Amplivox audiometers, has been introduced into the school health service in BAOR and FARELF with apparent success. This is of considerable value in the elimination of deafness as a possible cause of backwardness. It is hoped in due course to extend this to all overseas Commands.
A child psychiatric service is about to start in BAOR under the direction of the Command Psychiatrist, who will work in conjunction with the school health service in the assessment and treatment of maladjusted children. The family background will be investigated and parental problems solved as well. A similar service is planned for FARELF, and plans are going ahead for another in Middle East and the Mediterranean Theatres.

Speech Therapy is another service badly needed, and this has started in a small way in BAOR.

Advice on accident prevention in the home should be given at the child welfare clinics and at school.

Finally there is a group at present small but for reasons given earlier one likely to increase in size as time goes on, the mentally handicapped ineducable children. This includes the mongols, microcephalics, inborn errors of metabolism, cases of meningitis and encephalitis which have survived, cases with severe brain damage etc. Such children are unable to attend normal schools, but benefit considerably in the majority of cases from attendance at Day Training Centres, where they can be taught to live semi-independently and learn a simple trade which will bring in a small income.

From the parents point of view they can become a tragic burden. For army parents this is more than ever the case, as it is, to start with, very difficult to make provision for them in the United Kingdom, and impossible overseas. A soldier may therefore be confronted with having to leave his family in the United Kingdom when posted overseas, or alternatively, take the child with him, thereby causing a break in any training that may have started and a serious burden to the rest of his family. In the extreme, he may have to give up a promising military career in order to deal with his family problems.

Residential care for such children, where it exists, is generally institutional. Waiting lists are very long, and the regular moves which form part of the normal life of an army family tend to make the chance of admission impossible. There is clearly a need for some form of residential hostel, in the vicinity of a civilian day training centre, in which the children could be housed during their parents overseas tour. This we know would be expensive, but undoubtedly justified in the circumstances.

In conclusion, it can be said that the army has a medical service well adapted for the control of families' health. We must look on this as a growing commitment, an interesting one from the professional standpoint, and one which we must be constantly keeping up to date.