

## **WOC PLANS 07 ONWARDS – DISCUSSION PAPER**

### **INTRODUCTION**

The purpose of this paper is to promote a discussion about the future role of WOC amongst present committee members, possible future members and other interested parties. It is not in any way a plan of action, more a brainstorming of ideas first put together on the back of an envelope in a pub by Dalton and Chris just outside Birmingham.

We have put the ideas into 2 sections. The first is general ideas for the WOC UK committee; the second is specific ideas for country link persons.

Most of us on the WOC committee have other commitments, both in UK and overseas, and it may not be appropriate for WOC to take on some of the bigger ideas. Indeed it might not be appropriate for WOC itself to develop any of the ideas below, remaining instead as a subsection of the BOA, with good communications links to other organisations. But at the start of a new year it is worth reviewing our aims. We look forward to hearing other peoples thoughts and views on these or other subjects. Happy new year.

### **Section 1 – General ideas for the WOC UK committee**

#### **ORTHOPAEDIC EQUIPMENT, SUPPLIES AND IMPLANTS**

Many of us have been given donated items by theatre or ward staff which languish in offices or garages; donated them to WOC; or taken them to developing countries without knowing whether they will be used. Developing countries are often disorganised regarding quantifying their requirements. Some Companies are reluctant to donate implants and equipment because of concerns about legal implications.

Hilary Robinson has for many years been the main person in WOC who has taken an interest in the collection of orthopaedic equipment. Much benefit has resulted from this; however, we receive and distribute only a small amount of what is available. The sourcing, identification and organisation of the estimated hundreds of thousands of pounds (Tim Beacon's estimate) of time expired, once used or never used equipment is a big task. Storing it in one centre may not be efficient or feasible.

What is needed is

- 1) a database in the UK of a) what is required in each country b) what may be available from Companies c) items available in this and other countries and where stored.
- 2) Sourcing required equipment and implants with the help of colleagues who could liaise with several hospitals in their area.
- 3) Interact with Companies to acquire donations or unwanted supplies. Tim Beacon from Zimmer has experience in this field and has offered to work with us.
- 4) Interact with NHS Direct (who organise NHS supplies) and organisations who deal with discarded electronic equipment.
- 5) A data base of reputable companies in developing countries e.g. India, Vietnam, and China from whom we or the hospital can economically purchase supplies of good quality: several colleagues in India have offered to assist WOC.

*It is important that supplies from WOC do not suppress supplies and financial planning by the government of the country towards eventual independence - as part of their Orthopaedic Plan.*

## **COMMUNICATION**

Communication via the Newsletter has always been an important part of WOC's role; but this could be increased.

Most of us would agree that a regular Newsletter is important to give a regular review of WOC UK's activity. Recently funding for a paper journal has ceased and there have been lapses in publication. Clearly the content depends on what is submitted. Despite the good intentions of those who go, reports about working visits to a country are not submitted. Future publications may need to be by e-mail (as Orthopaedic Overseas Bulletin in USA). Some paper publication may be possible with suitable funding.

With an increased editorial staff a newsletter (or WOC journal) could be expanded to include the following:-

- a) More detailed descriptions of orthopaedic visits.
- b) Expansion of the newsletter to include more reports from other countries (Australia, USA, India).
- c) Progress of orthopaedic care in particular countries – by the country 'officers'.
- d) Progress with orthopaedic curricula and development of examinations.
- e) Reports on infection control in particular countries and how to manage.
- f) Interesting case reports.
- g) The treatment of a particular condition in certain countries.
- h) Review papers by respected surgeons e.g. Dr Jagadesh on polio care in India; Leprosy treatment by Professor George Anderson from Vellore.
- i) The development of nursing leadership skills in a given country.
- j) Lessons to be learned from Tsunami teams.
- k) Lessons to be learned from the Pakistan earthquake (from last BOA).
- l) Aspects of general ward and theatre management and leadership issues.

*A Journal of Orthopaedics for Developing Countries* could develop (Maybe the Americans eg OO could be encouraged to fund and run this). JBJS and other journals often do not provide relevant information. It is a pity that useful clinical and organisational information to improve health care often does not 'travel' from one country to another or from one part of a country to another.

WOC could help to disseminate this knowledge

This information could be available on the WOC website and in due course on Medline – if a Journal developed.

Alternatively efforts could be made to use existing journals like JBJS for major papers and smaller ones like Tropical Doctor for more general interest articles.

## **COLLABORATION WITH OTHER ORGANISATIONS**

WOC does liaise with other similar organisations in other countries, but there could be much closer links with these and other organisations.

WOC UK could encourage closer working links - including wider participation in the WOC newsletter.

## **ACCIDENT PREVENTION**

The Asian World Bank, WHO, and the Accident Prevention Unit in Surrey are involved in accumulating data regarding mortality and morbidity from Road Traffic Accidents - the major cause of death and disability in young people in the developing world.

Orthopaedic surgeons are in the front line with regard to understanding the consequences of what can only be described as an increasing world epidemic.

In their interactions with their Departments of Health, local orthopaedic surgeons (and visiting surgeons) are in a good position to emphasise the importance and cost effectiveness of road accident prevention compared to the greatly increased expense of death or treatment and possible disability (much literature available).

WOC could assist by maintaining a 'library' of relevant information and promoting increased awareness particularly when governmental decisions about orthopaedic care and accident prevention are made.

## **TEACHING VIDEOS**

John Guy has made a number of videos about relevant orthopaedic techniques. Many more could be made about various aspects of orthopaedic and nursing care, and theatre practice. The distribution of teaching discs by mail, internet or computer duplication in the country is now easy and inexpensive.

WOC could assist by organising and financing this distribution of knowledge.

It would be interesting to hear people's views on how or whether these videos have been used.

## **WOC FUNDING**

Current WOC funding, mostly from individual subscriptions, is modest: significantly increased funding would be needed if WOC increases its activity.

In the past applications to donor organisations for the WOC organisation as a whole have not succeeded but funding for individual projects (Malawi, Cambodia and Philippines) have been successful.

In WOC's case if funding from subscriptions were used for core activities such as secretarial assistance, general organisation, travel to countries etc. this would 'pump start' donations from other individuals and organisations.

Donors would be further attracted by 1) the financial commitment of Orthopaedic Surgeons to WOC via subscriptions 2) surgeons offering their services free of charge 3) all donated money going completely to the hospital or country involved 4) donated funds being organised and audited by WOC (rather than a donation to a particular hospital or health department in a developing country).

Recently £20,000 was raised for the Cambodian project with the help of a colleague with experience in fundraising. This required application to twenty organisations and adaptation of several applications according to individual requirements. It may be necessary and expeditious to pay for this expertise.

## **Section 2 – Ideas for country link persons**

### **ORTHOPAEDIC SURGEON TRAINING VISITS**

This is a traditional role of WOC; however, even after talking to previous visitors and reading reports, visiting surgeons can arrive in a country without adequate knowledge of who is going to be taught, what has been taught, existing knowledge of the trainees and the needs of the country. Also information about the visitor's abilities may be lacking in the country. The teaching programme can be badly organised and the visitor can leave with the feeling that the effort and expense of the visit could have been better utilised.

We were impressed by the Australian system in Fiji. In Fiji a specific orthopaedic curriculum was compiled. Well before their trip visitors were sent a detailed list of teaching topics remaining to be covered. In Fiji this curriculum was part of an orthopaedic course leading to a degree or certificate of training.

If arranged, a visiting hand surgeon might teach pre-arranged curriculum hand topics to orthopaedic trainees, similar topics but at different levels to general surgeons, their trainees and to medical students.

Pre-selection of hand operative teaching cases for general orthopaedic and putative hand surgeon trainees would also increase the quality of training.

This system would ensure that colleagues with specialist interests, who visit a country, will teach and operate within their sphere of expertise; and not be deterred because of concerns about dealing with complex problems outside their experience. Also better organisation would allow shorter teaching visits of two weeks rather than four. This would be a more practical proposition for a working colleague and could be combined with a family holiday. Colleagues are more likely to be agreeable when approached to fulfil such an organised teaching commitment.

After returning home continued teaching could continue with well organised internet links.

Many more teachers, especially younger and dynamic ones are needed from the UK and also developing countries. We in WOC can try to make visits more organised and attractive to putative recruits.

All this depends mainly of course on a reliable local organiser – on whose shoulders the workload lies.

### **ORTHOPAEDIC TRAINEE TRAINING**

Training in many developing countries is poorly organised. WOC could help improve this situation in several ways:-

1. *Develop a curriculum and an organised teaching programme* (see above).  
(Or make use of existing programmes e.g. the SICOT one)
2. *Facilitate sub-speciality training* e.g. hand, spine, reconstruction, paediatric, trauma etc at specialist units. Prolonged training in developed countries is against the ethos of WOC and experience has shown that permanent emigration can result. Short training visits, however, to carefully chosen units in developed countries or more prolonged specialist training in another developing country, particularly India, can be successful and economic. A recent six month training fellowship in India cost £1900 which included air fares and living expenses. The “hands on” training for polio and rehabilitation surgery was of a high quality and appropriate for the developing country. A database of units in India and elsewhere where training can be provided and their facilities and training opportunities would provide and induce trainees to improve their specialised knowledge.
3. *Continuing training via the internet.* Continuing interaction between the visiting surgeon and trainees by phone and internet links could continue after a visit. At present this can be cumbersome. An easy system needs development and promotion.
4. *Standardisation of orthopaedic training courses and examinations.* This is already occurring in East Africa and could be promoted in other countries to provide consistency of training and lead to an acknowledged orthopaedic degree or certificate. Some countries might not comply – and emigration problems would need consideration – but even an individualised and improved system would be better than the present situation. This could be a joint venture with other organisations e.g. Orthopaedics Overseas. Stephen Pinney, an American Orthopaedic Surgeon on the AOA academic board and an OO committee member, would welcome being involved with WOC in such a project. This could mean inclusion of some South American countries.
5. *An internet post-graduate training course could also facilitate training.*

## **ORGANISATION OF ORTHOPAEDIC SERVICES WITHIN A COUNTRY – DEVELOPMENT OF A NATIONAL ORTHOPAEDIC PLAN**

In most developing countries orthopaedic services are poorly organised without an agreed national plan. This often results in concentration of services around the Capital or major cities - where the better schools and facilities exist. The poor and those who live in outlying areas – the majority – may receive an inadequate service or no trained care at all. Colleagues in WOC UK and other countries have experience of many different systems of orthopaedic healthcare. In particular the Orthopaedic Clinical Officer system in Malawi has been particularly helpful in providing an effective system of orthopaedic care in Malawi. In most countries, however, planning is either non-existent or poor; too many or too few doctors are being trained without consideration of how they will be utilised; key personnel may leave a country because of low salaries and low morale; poor facilities and the quality and quantity of treatment is present in hospitals not just because of poor funding, but due to lack of planning, organisation, financial and administrative skills. This can be due to lack of expertise in Departments of Health, in hospital and primary care management, and amongst our orthopaedic colleagues. WOC could help countries who wish to improve their orthopaedic services by:-

1. Helping willing countries to develop their own Orthopaedic Plan for their Country.
2. Advising on the medical manpower, management personnel and resources for the Plan.

3. Specifically assessing and advising on the sub-speciality needs of a country e.g. spine, hand, trauma, tumour, and how to fulfil them.
4. Sponsoring clinical and non-clinical management training.
5. Advising about the organisation of a cost effective and clinically efficient orthopaedic department and orthopaedic healthcare system within a country.
6. Organisation of better ward and theatre practice.
7. Infection control.
8. Provision of appropriate equipment (and how to purchase economically).
9. Development of leadership and financial skills.
10. Improving nurse training in theatres and wards.
11. Helping to finance the early reorganisation of orthopaedic services in collaboration with the Government (grants required)
12. By arranging training visits of key personnel to and from the country to facilitate the above.

The above may sound grandiose – will not be appropriate to all countries, and will take time to develop - but WOCs non-governmental status and unique professional expertise could mean that this will become our most important role.

### **ORTHOPAEDIC MANPOWER ISSUES**

In developing countries – as in the UK – there is usually inadequate planning regarding staffing for the medical needs of a country.

There might be a high prevalence of complex limb trauma, polio deformity, spine injuries, paediatric pathology, hand injuries etc; but no plan of who or how many sub-specialists to train.

In the capital there may be a developing Orthopaedic Unit with a need for sub-speciality trained surgeons; in the 'provinces' a need for generalists – to practice under the guidance of the sub-specialists; and in rural areas a need for Orthopaedic Clinical Officers.

Also there can be the major problem that key staff may leave because of economic, political or security reasons.

WOC could contribute by 1) helping to assess the individual orthopaedic and nursing manpower needs of the country as part of an Orthopaedic Plan 2) stimulating discussions regarding personnel suitable and available for general and subspecialty training 3) helping to organise and finance training within the country by visitors, or in another country e.g. India for longer fellowships or developed countries for observer visits.

### **NURSE TRAINING**

There is little purpose in teaching improved and more complex orthopaedic care to surgeons unless this is matched by increased nursing expertise in the wards and theatre. In fact it can be dangerous to do so. In Cambodia the commencement of more complex surgery was discouraged until nursing standards in theatre and the wards were improved.

Improving nursing standards can be a complex issue particularly where long-term existing nursing staff are resistant to change, and poorly paid and motivated.

As well as improving bedside care by personal example and lectures and tutorials, there may be the need to improve leadership and management skills; and also the general organisation of the ward - staffing, hygiene, equipment and financial.

WOC could assist by supporting a *Nursing Section*. A recent advertisement in Nursing Journals showed that there are senior nurses in the UK who are interested in helping

developing countries. Mary Wood, the orthopaedic sister who worked in Cambodia, would organise this Section. Ward and theatre nursing staff would need to be recruited separately. Although WOC have funded a recently successful mission, separate funding from the nursing organisations in this and other countries is more likely to be available if linked with a WOC programme.

## **ORGANISATION OF AN ORTHOPAEDIC SOCIETY WITHIN A COUNTRY**

In countries where there are enough orthopaedic surgeons (even a few) the development of an orthopaedic society and orthopaedic committee is essential for 1) the continuing developing of good practice 2) monitoring of training 3) development of a curriculum 3) liaison with the government to develop an Orthopaedic Plan etc. WOC could offer help and advice with regard to running such a society and committee.

## **SPONSORING ANNUAL CLINICAL MEETINGS**

WOC UK could promote, help initially organise and fund Annual Clinical Meetings in countries to increase surgeon interaction and knowledge. We could also help to find and fund the participation of UK or colleagues from other countries to attend and teach. Such short visits could be an attractive introduction.

## **FUNDING OF KEY PERSONNEL**

This is a controversial and important issue. Often the smooth running and future development of a department can depend on a few important individuals. If they leave – and we have all seen examples of this – the consequences can be serious and a large amount of invested time and effort by many people inside and outside the country can be wasted. In Cambodia funding is provided for 2 extra nurses – to improve nurse quality; for an orthopaedic secretary – to improve efficiency; an extra \$20 per month for the instrument technician – who voluntarily does extra duties; and a small amount to senior nurses for extra teaching and administrative duties. The cost is modest, provides stability, rewards extra effort, promotes change and is a short to medium term measure until government funding is provided.

If he or she is essential, the Head of Department could need personal funding assistance to maintain a tolerable quality of life in order to remain in his/her country; and to maintain some enthusiasm in often difficult conditions. This is a part of the support we might provide.

## **HEAD OF DEPARTMENT - LEADERSHIP AND MANAGEMENT TRAINING**

Seniority and good clinical skills are not good enough on their own to effectively organise a department. Leadership and management skills – and political - are essential and may need help to develop.

In *developed* countries heads of department may be chosen because of abilities in these directions but in *developing countries* there may be only one individual with the seniority to fill this post.

WOC could help by sponsoring, arranging and financing teaching visits by acknowledged clinicians, with these skills, to the country; or by sponsoring courses. As well as the Head of Department these could include tuition for senior nurses and senior clinicians.

## **ORTHOPAEDIC SECRETARY**

In Cambodia the funding of a Cambodian orthopaedic secretary has proven helpful to 1) organise the teaching programme 2) assist the running of the orthopaedic unit 3) liaise with visiting teachers 4) act as a Personal Assistant to the Cambodian Head of Department 5) audit nursing and theatre activity 6) distribute information 7) helps the organisation of the Orthopaedic Society 8) helps liaison between the UK and the country. The funding for this post is modest.

WOC could assist by funding a suitable local employee.

### **OUTREACH CLINICS**

Polio camps, Mercy ships; trauma camps, club foot, Ponsetti technique sessions are all activities that WOC could support and help finance and expand.

### **ORTHOPAEDIC CLINICAL OFFICERS**

Although this has been mentioned before this Malawi programme is so relevant to the development of cost effective and good quality orthopaedic care programmes that it deserves a special note.

Unfortunately some countries are expensively training doctors (many of whom will no doubt wish to live near the main cities or emigrate) rather than clinical officers who can provide a good service throughout the whole country.

WOC could promote this effective scheme by arranging travel of key clinicians, ministry personnel and politicians to see the programme in Malawi.

### **PRIMARY CARE OF ORTHOPAEDIC CONDITIONS**

This is included as a separate section as big donor finance, and thus government finance is more obtainable if applications are under the umbrella of a 'Primary Care Project'.

In developing countries visitors often manage complex orthopaedic conditions which could have been more easily treated at an earlier stage. Examples are: 1) simple fractures treated inappropriately by poorly trained medical staff (or by traditional healers) who may splint a fracture adequately but who have no knowledge or judgement of the effects of swelling or excess pressure – thus causing compartment syndrome 2) infections (common in developing countries) are often neglected – thus causing joint destruction 3) joint deformities such as in club foot and polio which could be effectively treated early are often neglected because there is no early system of identifying patients for treatment; and no system of educating parents and health workers about the early effectiveness of treatment 4) compound tibia fractures often present late ( and thus more difficult to treat) because patients seek less expensive or familiar initial treatment with a local healer - or by poorly trained surgeons in other hospitals

Good quality early treatment for these conditions is better for the patient. Life long disability, and the economic and social ruin that this can cause could be avoided. Also earlier and effective treatment is cost effective for the country (several studies confirm this) as it avoids unnecessary complex and expensive surgery and results in a tax- paying productive individuals; however organisation, education and money is required. .

A 'Primary Care Project' project could involve 1) a Malawi type Clinical Orthopaedic Officer scheme 2) schemes to educate existing doctors, surgeons, nurses, village elders, local healers, and the population in general, to recognise the importance and effectiveness of early treatment.

WOC could facilitate the above by developing expertise in this field and by obtaining finance.

Dalton Boot and Chris Lavy, November 06