SICOT/WOC Seminar on Postgraduate Training in Orthopaedic Surgery and Traumatology
19 February 2010 – Pokhara, Nepal

Report by Prof Syed Muhammad Awais

Jointly supported by

- Organising Committee of 1st Nepal/Japan Combined Orthopaedic Symposium at Pokhara, Nepal 18-20 February 2010
- International Society of Orthopaedic Surgery and Traumatology (SICOT)
- World Orthopaedic Concern (WOC)
- Orthopaedic Association of SAARC Countries (OASAC)

Background

- The SICOT Education Committee has been discussing for a long time how SICOT should increase its role in uplifting “Education and Training” in the world, especially in developing countries, and a basic survey was carried out by Syed Awais in 2007-08.
- In May 2009, during a meeting between Syed Awais (Secretary General WOC) and Ger Olyhoek (President WOC) in Arnhem, Netherlands, it was decided that SICOT and WOC would make joint efforts to improve quality of orthopaedic care in developing countries by improving orthopaedic training. The proposal was discussed by Syed Awais with Maurice Hinsenkamp, SICOT President Elect, in Brussels, and it was further agreed to hold a SICOT Seminar in developing countries to start the work. The Seminar could not take place in Lahore during 2009.
- Meanwhile, in November 2009, on the eve of the Annual International Conference of the Pakistan Orthopaedic Association in Lahore, a meeting was held with Ramesh Prasad Singh, Organising Secretary of the 1st Nepal/Japan Combined Orthopaedic Symposium to be held in Pokhara, Nepal, from 18 to 20 February 2010. It was decided to hold the SICOT Seminar on postgraduate training in the field of orthopaedic surgery on 19 February during this Symposium in Pokhara.
- The official support for this seminar was given to Ramesh Prasad Singh by the Organising Committee of the 1st Nepal/Japan Combined Orthopaedic Symposium, and to Syed Muhammad Awais by the SICOT President and the WOC President.

Goals of the Seminar

1. The quality of health care in the field of Orthopaedics and Traumatology needs improvement in the developing countries.
2. To improve the quality of care in the best way possible is to improve the quality and efficiency of the system of education in the field of orthopaedic surgery.
3. To discuss the challenge of improving quality of orthopaedic care in the developing countries, share the experiences of different developed countries and lay down recommendations regarding the following areas:

i. Minimum standards (Framework) of Education in Orthopaedic Surgery and Traumatology. Entry Requirements.
ii. Duration of different Levels of Education in Orthopaedics.
iii. Roles and Responsibilities of Faculty and its development.
v. Assessments, Progression and Examinations.
vi. Minimum Requirements for Training Hospitals.
viii. Relationship of Country-Degree Awarding Institution-Teaching Hospital-Training Department-Programme Director-Trainers.

It is hoped that the achievement of the above goals will result in improving the orthopaedic health care services.

**SEMINAR PROCEEDINGS**

*Chairman:* Syed M. Awais, MBOD-SICOT and Sec Gen-WOC

*Moderator:* Bachchu Ram, President, Nepal Orthopaedic Association

*Speakers:*

**Thailand:**
Banchong Mahaisavariya, Dean Graduate Studies, Mohidal University

**Nepal:**
Ashok Bajracharia, HOD, Bir Hospital
Deepak Mahera, HOD, TUTH
Ashok K. Banskota, B&B Hospital and University
J.R. Panday

**India:**
Vijay Kumar Khariwal, MDOCT & Research Center, India

**Japan:**
Kousei Yoh, Hyogo College of Med, Japan

**Bangladesh:**
M.A Based, Dhaka Medical College & Hospital, Dhaka

**Pakistan:**
Irfan Mehboob, HOD of Orthopaedics, SZ Med College, RYK
Syed M. Awais, KEMU, Lahore
The information provided by the speakers is summarised below.

1) Duration of Levels of Education:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Country</th>
<th>Existing practices</th>
<th>Further opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thailand</td>
<td>4 years (6 months Gen Surg + Specialties - 3.5 years Orthopaedics</td>
<td>PhD During Residency.</td>
</tr>
<tr>
<td>2</td>
<td>Nepal</td>
<td>3 and 4 years MS 5-year FCPS</td>
<td>Nil</td>
</tr>
<tr>
<td>3</td>
<td>India</td>
<td>2-year Diploma. 3-year FCPS, MS, Indian Board</td>
<td>3-year Sn. Lectureship 2-year subspeciality Indian Board</td>
</tr>
<tr>
<td>4</td>
<td>Japan</td>
<td>6 years</td>
<td>PhD during 6 years 2-year super specialization</td>
</tr>
<tr>
<td>5</td>
<td>Bangladesh</td>
<td>2-year Diploma; 3 year MS; 5 year FCPS</td>
<td>Nil</td>
</tr>
<tr>
<td>6</td>
<td>Pakistan</td>
<td>5-year MS, FCPS</td>
<td>2 year super specialization Fellowships</td>
</tr>
</tbody>
</table>

2) Learning Objectives:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Country</th>
<th>Existing practices</th>
<th>Log Book</th>
<th>Research</th>
<th>Mandatory workshops</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thailand</td>
<td>Caseload in diff. subspecialties</td>
<td>yes</td>
<td>Research Paper</td>
<td>yes</td>
</tr>
<tr>
<td>2</td>
<td>Nepal</td>
<td>same</td>
<td>yes</td>
<td>Thesis</td>
<td>+/-</td>
</tr>
<tr>
<td>3</td>
<td>India</td>
<td>same</td>
<td>yes</td>
<td>Thesis</td>
<td>+/-</td>
</tr>
<tr>
<td>4</td>
<td>Japan</td>
<td>same</td>
<td>yes</td>
<td>Research Paper</td>
<td>yes</td>
</tr>
<tr>
<td>5</td>
<td>Bangladesh</td>
<td>same</td>
<td>yes</td>
<td>Thesis</td>
<td>+/-</td>
</tr>
<tr>
<td>6</td>
<td>Pakistan</td>
<td>Caseload + SICOT Manual</td>
<td>yes</td>
<td>Thesis or Res. Paper</td>
<td>yes</td>
</tr>
</tbody>
</table>

3) Assessments, Progression and Examinations:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Country</th>
<th>Existing practices</th>
<th>Progression after Examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thailand</td>
<td>Yearly Examination and Progression Research Paper writing Final Examination (written and oral)</td>
<td>yes</td>
</tr>
<tr>
<td>2</td>
<td>Nepal</td>
<td>Thesis Approval Final Examination (written and oral)</td>
<td>no</td>
</tr>
<tr>
<td>3</td>
<td>India</td>
<td>Thesis Approval Final Examination (written and oral)</td>
<td>no</td>
</tr>
</tbody>
</table>
### 4. Japan
- Yearly Examination and Progression
- Research Paper writing
- Final Examination (written and oral)

- **Yes**

### 5. Bangladesh
- Thesis Approval
- Final Examination (written and oral)

- **No**

### 6. Pakistan
- Intermediate Examination
- Thesis/Dissertation or Two Paper Writing
- Final Examination (oral and written)

- **No**

### 4) Certification of Training Hospitals:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Country</th>
<th>Existing practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thailand</td>
<td>Training Hospitals and Departments Certified</td>
</tr>
<tr>
<td>2</td>
<td>Nepal</td>
<td>same</td>
</tr>
<tr>
<td>3</td>
<td>India</td>
<td>same</td>
</tr>
<tr>
<td>4</td>
<td>Japan</td>
<td>same</td>
</tr>
<tr>
<td>5</td>
<td>Bangladesh</td>
<td>same</td>
</tr>
<tr>
<td>6</td>
<td>Pakistan</td>
<td>same</td>
</tr>
</tbody>
</table>
Recommendations

The recommendations were discussed and prepared by:

Ramesh Prasad Singh (Nepal), Takumi Yonezawa (Japan), Pervez Anjum (Pakistan), Raju Vishia (India), Deepak Mahara (Nepal), Kousei Yoh (Japan), R.K. Shah (Nepal), Ashok Ratna (Nepal), Nasee M. Akhtar (Pakistan), Vijay Kumar (India), A.K. Banskota (Nepal), Babu Kaji (Nepal), Irfan Mehboob (Pakistan), Syed M. Awais (Pakistan), A. Based (Bangladesh)

1. **Entry Requirements**

   - Higher School for 12 years with Biology and Science subjects.
   - Entry Test (where licensing examination is practiced, it can act as entry test).
   - Additional requirements of service may remain optional.

2. **Duration of Levels of Education**

   - India, Nepal and Bangladesh need three-year training programme to provide enough orthopaedic care providers to their people.
   - These countries need short duration training programmes for producing service providers and long duration for academicians and researchers.
   - Proposal:
     There shall be provision to produce two-year diploma holders with clinical skill training, besides long duration programmes. These diploma holders may be allowed to re-enter into a long-term programme and will be given one year relaxation in training tenure.
   - All programmes (Diploma, MS/BNB/FCPS/MD/PhD) must be structured and then managed.
Framework of duration of levels of education:

All Degree Awarding Institutions may arrange education in the field of Orthopaedic Surgery as below:

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Minimum duration</th>
<th>Nomenclature</th>
<th>Additional opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>MBBS/MD</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Diploma</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>MS/Fellowship/National Board</td>
<td>PhD</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>Subspecialty Fellowship</td>
<td>PhD</td>
</tr>
</tbody>
</table>

3. Learning Objectives

<table>
<thead>
<tr>
<th>Learning Guideline</th>
<th>Log Book</th>
<th>Research</th>
<th>Mandatory Workshops</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Cases Load for each of the subspecialties may be made for practical training.</td>
<td>A Uniform Logbook may be developed so that residents may find convenient to fill even when working abroad.</td>
<td>(a) Thesis or Dissertation of Level of M.Phil. OR (b) Minimum one research paper</td>
<td>Common List and Curriculum of each workshop must be developed so that residents may attend in other institutions.</td>
</tr>
<tr>
<td>(b) SICOT Training Manual may be adapted for Cognitive Learning and may be indigenized.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Learning Objectives, Training Manual, Log Book, Guidelines for Research and List of Mandatory Workshops along with their Learning Objectives may be laid down.

1. Framework: 4-Examination Regular Assessments, Assignments, Work Load Experience carried out and recorded in the Log Book.


3. Intermediate Examination, if any, may be passed any time before final examination.


5. Final Exit Examination subjected to three certificates:
   A. Completion of Residency Training
   B. Approval of the Log Book
   C. Approval of the Research Work

Exit Examination will be written and oral.
4. **Certification of Training Hospitals**

There may be Minimum Requirements for Recognition of a Teaching Hospital and a Teaching Department for “Recognition” of Training Hospitals and Departments to run Diploma / Residency / PhD / Fellowship (one or all) Programme.

Common list of subspecialties:

- Arthroscopy and Sports Medicine
- Arthroplasty
- Hand Surgery
- Musculoskeletal Oncology
- Paediatric Orthopaedics
- Spine
- Traumatology

5. **Quality Assurance**

All Programmes must be subjected to three-step Quality Assurance Procedures; i.e.:

1. **Self Review**: Regular Monitoring of the Programme by the Programme Director in each Teaching Hospital, resulting in Annual Monitoring Reports.

2. **Internal Review (Peer Review)**: 2- to 3-year periodic review by two peers outside the teaching hospital to review the monitoring reports and to review the ongoing programme.

3. **External Review (Accreditation)**: Every 5-10 years, a third party review of the training department and the programme.

In the concluding session on 20 February 2010, at 11 a.m., the recommendations were presented to the participants. The following decisions were made:

- Organizing a “SICOT Seminar on Postgraduate Training” was the right decision.
- The work started must continue to shape the future of orthopaedic education in developing countries.
- Orthopaedic surgeons in SAARC countries must assist the leaders of medical education and the politicians to shape the future of orthopaedic training as recommended by them.
- The participants of this seminar will voluntarily give their recommendations to Syed Muhammad Awais.
Final Recommendations

Health is no more a regional or national issue, it is international. Patients in different countries of the world (developed and developing) must have access to a high quality of health care. In reality the quality of care available to people in different countries is not uniform. All countries should pay special attention to this gap and make special efforts to narrow and eliminate the gap.

- Professional organizations in the field of Orthopaedic Surgery and Traumatology working all over the world have an obligation to make collective efforts to recommend "frameworks of universal minimum requirements (FUMR)" for providing Orthopaedic Health Care. This will assist the health leaders and politicians of developing countries to elevate their quality of health care to the level of developed countries.

- Professional organizations in the field of orthopaedics could as a first step develop, FUMR of "Education and Training in the field of Orthopaedic Surgery and Traumatology". This will improve the professional competencies of the orthopaedic care providers and will raise the technical standards of the teaching hospitals. This will also improve the faculty and research, and thus stimulate further new developments.

- The FUMR should address only the key elements of orthopaedic education and training and allow countries to accommodate their local needs.

- The FUMR, when applied the world over, will encourage trainees to travel to training centres in other countries to learn and share their experiences. Similarly, the faculty (trainers) must be encouraged to travel for teaching & training and share their experiences and skills with others in the region.

The achievement of the above goals will result in an overall improvement in orthopaedic health care services for people around the world, and will promote understanding and friendship among societies/nations.
Traditional Nepali Thanks to the Participants