# The Role of the Forum of Sudanese Professionals Working in Oman (FSPWO) in Introducing & Supporting Medical Informatics & Medical Educational Technology in Sudan

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**Abstract:** Sudanese professionals working abroad responded to calls of duty to help in development efforts in Sudan. Many of them formed groups that coordinated & organized these efforts. One of these groups was the Forum of Sudanese Professionals Working in Oman (FSPWO). It was formed in 2003 with the aim of coordinating the will-ingness & readiness of the professionals to contribute to development efforts in Sudan. This paper discusses the role of the FSPWO in transferring the knowledge & skills in the fields of medical informatics & educational technology to practitioners & educators working in the health field. The main technologies addressed were related to clinical decision support, particularly evidence-based medicine & the use of technology in learning & continuing medical education particularly e-learning & digital libraries. Several workshops were conducted in collaboration with SPAKTEN & an e-learning strategy was developed together with the development with digital health libraries.

## 1 Introduction

The FSPWO was established in 2004 following a forum held in Khartoum in response to a call from the SSWA in an initiative to make use of the Sudanese Diaspora in development attempts & efforts in Sudan. The FSPWO was thereafter encouraged & supported by SPAKTEN which was also the result of the meeting in 2003.

### 2 The FSPWO committee

A committee was nominated and elected in the general meeting. It included representatives of the various sectors, namely Education, Engineering & Technology, Economics, Health & Health education & Law. The committee then selected a chairman, a deputy & three members.

# 3 FSPWO objectives & activities

It was decided that the forum works in three main areas:

- 1. activities targeted for Sudanese working in Oman
- 2. responses to requests & needs from Sudan
- 3. commitments, workshops & conferences organized by the forum & held in Sudan

#### 3.1 Activities targeted for Sudanese working in Oman

The aim of these activities was to make use of the professionals working in Oman & educate & train Sudanese expatriates. There were two types of activities:

- a. specialized training workshops conducted by professionals for other professionals e.g. computer skills & research methodology
- b. Public lectures by professionals for the Sudanese living in Oman.

#### 3.2 Responses to requests & needs from Sudan

FSPWO often received requests from institutions in Sudan asking for help with the formulation of a strategy, a review of a curriculum or a writing of a research or a project proposal. FSPWO responded by nominating the appropriate person/s who usually responded positively & appropriately.

#### 3.3 Commitments, workshops & conferences organized by the forum & held in Sudan

These types of activities were actually the main task which really reflected the will & desire to transfer knowledge & expertise of the professionals to help with development efforts in Sudan. There were three main types of activities:

- a. Service & teaching commitments which included working in a hospital or teaching a course in one of the universities during the summer vacation
- b. Workshops which are organized & conducted by the expatriate professionals & in many instances some other invited foreign professionals.
- c. Conferences organized by the expatriate professionals & in many instances with participation some other invited foreign experts.

# 4 Activities which reflect the transfer of Medical Informatics & Educational Technology

FSPWO stared these activities based on a strategy with the following objectives:

- 1. Spreading the culture of Health Informatics among health educators, practitioners, decision makers & the public
- 2. Helping with establishment of the necessary infrastructure & links necessary for the practice & use of health informatics
- 3. Training prospective users of the technology

The aspects of health informatics to be addressed included:

- 1. ICT issues pertaining to e-learning in health & health education like the establishment & efficient use of digital libraries
- 2. Decision support systems & facilities like ICT for evidence-based health practice, telemedicine & drug information systems
- 3. Hospital Information Management Systems like patient record systems, laboratory information systems & radiology information systems
- 4. Virtual education software & hardware like simulators & mannequins

Workshops, conferences & other activities organized by FSPWO

#### 4.1 E-learning workshops

1. First E-learning workshop

This was conducted in the Educational Development Centre, Faculty of Medicine, University of Khartoum in 2004. It was the first of its kind since the concept of e-learning was not known before that.

 Second E-learning workshop in the 1<sup>st</sup> international conference on medical education Feb 2005

This was conducted during the 1<sup>st</sup> international conference on medical education reform in Sudan. Participants were from most of the medical schools in Sudan.

 Third E-learning workshop in the 2<sup>nd</sup> international conference on medical education Feb 2007

This was conducted during the 2<sup>nd</sup> international conference on medical education reform in Sudan. Participants were from most of the medical schools in Sudan.

- 4. First computer-assisted assessment workshop This was conducted during the 1<sup>st</sup> international conference on medical education reform in Sudan. Participants were from most of the medical schools in Sudan. It was conducted with the help of Dr. Ibrahim Inwa from the College of Medicine, Sultan Qaboos University.
- Second computer-assisted assessment workshop This was conducted during the 2<sup>nd</sup> international conference on medical education reform in Sudan. Participants were from most of the medical schools in Sudan.
- 6. Train the Trainers Assessment & Question banking Workshop This was organized in the Educational Development Centre, Faculty of Medicine, University of Khartoum in collaboration with the IDEAL international consortium of assessment & question banking. Participants were from most of the medical schools in Sudan. At the end participants formed the Group for Assessment in Medical Education (GAME). The objectives of the group include training & collaboration in the formation of a joint electronic questions bank.

#### 4.2 Evidence-based medicine workshops

- First Evidence-based medicine workshop
   This was conducted in the Educational Development Centre, Faculty of Medicine, University of Khartoum in 2004. It was the first of its kind since the concept of EBM was
  - not known before that.
- 2. Second Evidence-based medicine workshop

This was conducted during the 1<sup>st</sup> international conference on medical education reform in Sudan. Participants were from most of the medical schools in Sudan. It was conducted with the help of Mr. Abdalla Al-Muneeri from the Centre of Evidence-based Medicine, Sultan Qaboos University.

3. Third Evidence-based medicine workshop

This was part of the first International conference of EBM in Sudan. This was organized be the Sudanese EBM Association (SEBMA), the members of which were primarily Sudanese working abroad, mainly in Saudi Arabia. In addition to the contribution from Oman, there were speakers from Egypt & Saudi Arabia. This was followed by the formation of the Centre of Evidence-based Medicine (CEBM) in the Centre of Continuing Professional Development (CPD) of the Federal Ministry of Health, of which the former chairman of FSPWO is the educational secretary. It is also the office of SEBMA.

- 4. Forth Evidence-based medicine workshop
  - This was mainly concerned with the development of systematic reviews. It was organized in 2007 in collaboration with the Cochrane Collaboration Bahrain branch with contribution from its co-chair, Dr. Dunia Al-Hashimi & Dr. Ahmed Al-Asfoor.
- 5. Fifth Evidence-based medicine workshop

### 4.3 The e-learning strategy & medical digital library initiative

An e-learning strategy was developed by the Forum of Sudanese working in Oman including the development of Medical, Pharmacy & Nursing digital libraries & a comprehensive e-learning program for medical educators & practitioners. Efforts were exerted to spread this culture & to advocate its adoption. Many universities are now using the library & are training their staff on its effective use & the use of other skills pertaining to e-learning.

#### 4.4 Lessons learned and conclusions

- 1. As judged from the enthusiasm of most of the participants in these activities, the health professionals started to appreciate the need for the new competences in the field of health informatics and to realize their role in improving patients care.
- 2. Most of the health professionals and educators and some of the decision makers are now accepting and admitting that expatriate nationals have a role to play in the development efforts in Sudan.
- 3. It is now appreciated that the role of SPAKTEN in coordinating and collaborating and these efforts is of paramount importance and needs to supported & expanded
- 4. The Sudanese Diaspora & their counterpart colleagues in their country of residence and work are now actively involved in these efforts but these efforts need to be organized
- 5. The experience of FSPWO is a useful one and can be copied and duplicated in countries with similar numbers or larger numbers of expatriates in the Gulf countries, Europe & the USA