# PART I

## Diaspora Contribution to Home Country

# Making a systematic diaspora contribution to Sudan: Experience from the Sudan Health Consultancy group

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**Abstract:** In this paper by the Sudan Health Consultancy group, we share and reflect on our own experiences of making a systematic diaspora contribution to Sudan. We feel that our contribution to Sudan has been facilitated greatly by: firstly, the way we organise ourselves as a group and our collective skills and expertise, secondly, our partnership working and how we have systematically partnered with influential organisations and practically, by planning and tracking our work programme, and ensuring we make the time to deliver voluntary contributions to deadline. This paper therefore sets out how we are organised, and highlights our work programme. We hope this will stimulate other groups to set themselves up formally as we have, and also encourage further members to join the Sudanese Public Health Network.

## 1 Overview

### 1.1 Summary

In this paper by the Sudan Health Consultancy group, we share and reflect on our own experiences of making a systematic diaspora contribution to Sudan. We feel that our contribution to Sudan has been facilitated greatly by:

- Firstly, the way we organise ourselves as a group and our collective skills and expertise.

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- Secondly, our partnership working and how we have systematically partnered with influential organisations.
- And practically, by planning and tracking our work programme, and ensuring we make the time to deliver voluntary contributions to deadline.

This paper therefore sets out how we are organised, and highlights our work programme. We hope this will stimulate other groups to set themselves up formally as we have, and also encourage further members to join the Sudanese Public Health Network.

### 1.2 Context

Sudan is squeezed by the triad of poverty, war and politics. As a symptom of this, we see broad inequalities; material deprivation, poor infrastructure and poor health. From having high GDP in the 1960s and 70s, we became one of the world's poorest countries.

Encouragingly, recent estimates put us as one of the fastest growing economies (UNDP 2008). This has attracted some of the diaspora to return, and while others remain outside Sudan, efforts to support their contribution will transfer not only experience, education, and skills, but also their international connections and "social capital."

## 2 Introducing the group

### 2.1 Group Profile

The Sudanese Public Health Network in the UK was established in 2003. Initially an e-group and with a growing membership, the founding members recently constituted into a formal group called the Sudan Health Consultancy. We have been active since 2006 as the Sudan Health Consultancy, and are in process of registering for charitable status. We are the core group who oversee the Sudanese PH Network in the UK. A voluntary group, we endeavour to assist colleagues and organisations in the Sudan to share knowledge, skills and ideas between UK and Sudan.

### 2.2 Our Mission and Aims

Our mission is to encourage and foster peer support, development and sharing of public health knowledge and skills within and between professionals in Sudan, the UK and internationally. The group's vision is to contribute to building in Sudan a nation of healthy individuals, families and communities, served by a health system that is equitable, accessible, affordable, efficient and consumer-friendly in which the society participates actively.

Our main aim is to improve public health practice in Sudan, through the development of advanced public health skills and learning from international experience. We believe that a sound public health approach is the shortest, best, most cost-effective evidence-based way to a rapid improvement of health in Sudan.

### 2.3 Credibility

We currently have ten members working in public health in the UK. Collectively, we have experience of working in the NHS and universities in England, Scotland and Ireland, and previously in the Sudan.

We are a group of committed and highly specialist consultants in public health. Our accreditation and experience comes from public health training completed in the Sudan and in the UK, together with membership of the UK Faculty of Public Health, and working at senior levels in the UK. We have listed our members' roles and qualifications in the last section.

Collectively, we have experience in strategic development, workforce development, policy and planning, maternal and child health, health protection, information, surveillance and evaluation, palliative care, teaching, training and research. With our broad base of work and partnership working, we can advise and collaborate on the variety of issues related to public health, the wider determinants and working with sectors other than health.

## 2.4 Our Activities

The Sudanese Public Health Network in the UK (SPHNUK) was the forerunner of the Sudan Health Consultancy and still continues to function as a network open to all colleagues interested in public health in the Sudan. The group was started in April 2003, and by the 13th of May 2003 the yahoo e-group was formed. Files and a log of discussions are available at Sudanese_Public_Health_Network@yahoogroups.com.

The mission of this wider network is to raise the public health profile of the specialty within and outside of Sudan and to support group members in training and sharing best practice. Membership of the group is open to all professionals who share this vision; both medical and non-medical.

**Wider membership:** There are now 24 members of the SPHNUK (and rising) representing a wide range of professionals; consultants in public health, trainees in public health and academics who work in UK, Sudan and further afield. We have also established working relationships with other networks interested in public health in Africa, and have been credited by establishment of the Nigerian and Zimbabwean PH networks who have been inspired by our experience.

**Teleconferences:** Electronic communication is our preferred mechanism of keeping in touch with each other and partners. In addition, we keep track of our work programme via monthly teleconferences. Occasionally we invite partners to join part of the teleconference to discuss progress and updates.

**Newsletters:** We produce quarterly newsletters focusing on sharing of skills and knowledge in short articles. These articles will usually summarise areas of recent work, useful evidence based guidance, literature reviews, health needs assessments, evaluations and an array of other specialist areas of public health. The newsletters are our portal for the group communication with the wider public health community in Sudan, the UK and beyond.

**Postcards from UK:** From October 2006, we have produced a regular feature in the Sudanese Journal of Public Health. Similar to our newsletters, the 'Postcard from UK' articles are a way of disseminating good practice from the UK to all readers of the journal.

**Supporting training:** We have wide networks within our local regions with training programmes and academic institutions. We are now in a position to organise limited service placements for trainees on Masters of Public Health (MPH) modules.

## 3 Our Methods and Our Work

### 3.1 Our Partners

We have established formal links to recognised professional and academic institutions in Sudan and UK, including the UK Faculty of Public Health (FPH). We have:

1. Signed a five year Memorandum of Understanding (MoU) with Sudan Federal Ministry of Health in May 2007
2. Agreed a work programme for 2008/09
3. Enrolled our members onto the UNDP Transfer of Knowledge Through Expatriate Nationals project in Sudan as volunteers (TOKTEN, 2008)
4. Contributed to workshops, training and strategy development in the Sudan, including the 5 year Health Strategy.
5. Engaged in training activities with leading universities in the UK and the Peoples-Uni.

### 3.2 Opportunities for transfer of learning

On reflection, the main methods we use to transfer learning and skills are:

- **Influencing policy:** We have commented on health policy and strategy in development. For example, we were invited to take part in the National Health Policy Consensus Building Workshop, Khartoum, Sudan, 13-14 May 2007.
- **Influencing clinical practice:** We work with clinicians to support clinical effectiveness or to develop new services. As an example, we acted as a catalyst to stimulate work on palliative care.
- **Training in Sudan:** As part of the agreed work programme for 2008 with the Federal Ministry of Health, we ran training workshops on outbreak control using Rift Valley Fever as an opportunity for reflection and learning, a workshop on Summary Measures of Population Health and training on project management.
- **Training in UK:** Using our links to training programmes in our regions, we are now in a position to organise limited service placements for trainees on MPH modules. We have also run several International Health workshops in UK universities, including Cambridge and Liverpool.
- **Educational:** We publish a quarterly newsletter and we have a regular article in the Sudan Journal of Public Health called 'Postcard from UK'.
- **Distance learning:** We are linking in with the Peoples Open Access Educational Initiative www.peoples-uni.org; a revolution in affordable distance learning for developing countries

### 3.3 Capacity and Capability

Our style of collaboration with our partners in Sudan depends on the kind of assistance required. As a group based outside Sudan, our members have other full-time commitments and work out-

side of working hours in their own time on the group activities. We are not entirely free in terms of time and freedom to travel to Sudan. We normally take the opportunity of social visits to Sudan to meet directly with partners in Sudan, and run training sessions or workshops. There is wider opportunity to review documents and generally advise and assist via electronic communication, and remote assistance.

## 4 Highlights from our work programme

As the main focus of this paper, we reflect on our experiences of delivering a work programme that includes work with the Ministry of Health, work with clinicians e.g. on palliative care, and work with international organisations to benefit Sudan.

We have collaborated with the Ministry of Health officials, and we have advised department leads on:

- Statistical process control charts for surveillance of malaria
- Measuring population health using summary measures
- The roadmap to improving maternal health
- Systems for outbreak investigation and management

We also plan to work with Ministry of Health Southern Sudan on strategy and influence.

### 4.1 Statistical process control charts for surveillance of malaria

In 1997, the Khartoum State Ministry of Health set up a surveillance system for malaria where cases were reported weekly from health centres and hospitals across the State. At the time, we calculated the average expected malaria cases for each district by month and the 95% confidence limits. Vector control activities would commence in the districts when the numbers of cases exceeded the upper 95% confidence limit.

In 2007, we suggested to the Ministry to pilot a new method using Statistical Process Control (a decision tool borrowed from the industrial sector). The upper control limit is based on 3 standard deviations. Unlike the previous method, the standard deviation is calculated from the differences between one week and the next. Outbreaks are defined by a single breach above the upper control limit, or if there is an increasing trend, or if cases remain above average for 7 consecutive weeks.

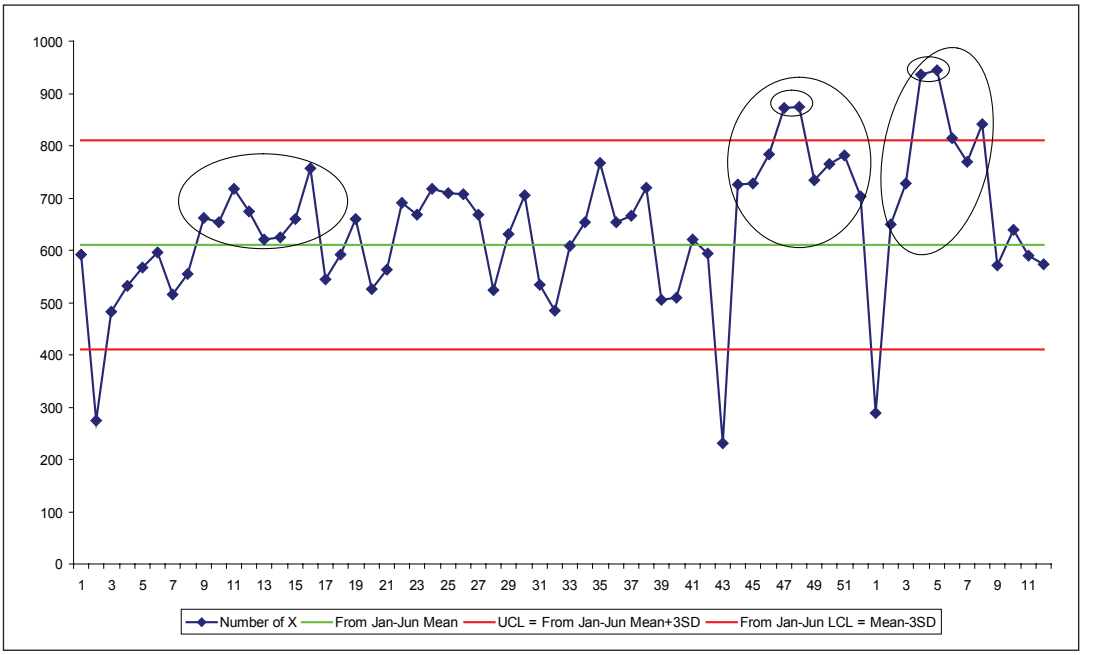
Using data from the previous year, the figure below from one locality in Khartoum demonstrated three outbreaks in 2006 (circled) that continued to breach the control limits into 2007, and could have been ascertained earlier using this technique.

### 4.2 Using summary measures of population health in Sudan

Summary Measures of Population Health (SMPH) combine mortality and morbidity information and are increasingly being used to express the burden of disease at the global as well as the national level in many countries.

A one-day orientation workshop was held in August 2008 to familiarise public health practitioners in Sudan with the concepts underlying SMPH, to enable them to interpret SMPH and to discuss their relevance to policy making in Sudan (Abdalla, 2008).

**Fig. 1 Reported malaria cases, Khartoum Locality, Khartoum State, Jan 2006 to March 2007**




*Source:* Data supplied by Epidemiology Department, Khartoum State Ministry of Health. Analysis by Dr MI Abdel Aziz. Data for Jan-Jun 2006 used to prepare control chart limits.

The workshop covered concepts in measuring population health as well as specific concepts in summary measures. The session included a presentation on the mortality and morbidity components of health gap measures: Disability-adjusted-life-years (DALY), Healthy Life Years (HeaLY) and Quality-adjusted-life-years (QALY). The differences between them and their uses were explored with simple worked examples.

The workshop concluded with a discussion on the relevance of SMPH to policymaking in Sudan. While some participants thought that mortality remains more important for monitoring and evaluation, others had the view that accounting for disability is becoming important due to the increase in the prevalence of non-communicable diseases such as diabetes and hypertension.

The dearth of mortality information at national and state levels was highlighted. The workshop was therefore an opportunity to advocate for a National Burden of Disease Study to produce information that can be used for evidence based policy and planning in Sudan.

## 4.3 The roadmap to improving maternal health

As part of our agreed work programme with the Federal Ministry of Health, we were invited to contribute to strategy development for maternal health. Remote comment on the draft roadmap was prepared with a consultancy type activity proposed. The group were encouraged with the approach in the roadmap and were keen to contribute to implementation.

**Table 1 Areas of work suggested by Sudan Health Consultancy to implement the road map**

| | |
|---|---|
| 1. | On going media campaign, updated regularly to reflect latest evidence and political, social changes and public expectations |
| 2. | Development of a minimal antenatal care package, including levels of risk assessment at various stages of the health care hierarchy. |
| 3. | Review of childhood disease if necessarily |
| 4. | Review of health care equipment in line with minimal standards and update |
| 5. | Development of a standard national curriculum for village midwives |
| 6. | A package of further training for traditional birth attendants |
| 7. | Development of a blanket risk assessment tool for traditional birth attendants taking into account their limited abilities of literacy. |
| 8. | The development of workforce plan for monitoring and development |
| 9. | Resource mobilisation to improve services in remote and deprived areas |
| 10. | A statutory notification system of child and maternal deaths |
| 11. | Political commitment and national drive |
| 12. | Infrastructure for partnership working (stakeholder involvement in the Maternal and Child Health Council steering and working groups) |
| 13. | Mechanism for death and birth registration using basic IT. |
| 14. | Consultation with wider stakeholder on the road map and implementation plans |

Although the proposed activity in Sudan has not taken place yet, the group have already shared our thinking with the programme leads, and continue to contribute to this agenda.

## 4.4 Outbreak Investigation & Management: Systems Overview Workshop

Disease outbreaks cause sharp increases in morbidity/ mortality/ disability, disrupt living and working conditions, disrupt the economy, provoke considerable public anxiety, and pose higher risk in the poor, the malnourished, the very young and the old. They are predictable outcomes of poverty, poor environmental health, and flooding events, and are always unwelcome occurrences.

During the Rift Valley Fever outbreak in Sudan in 2007, our group prepared a Postcard from UK to the Sudanese Journal of Public Health (Abdel Aziz, 2008). This reflected on the human and economic costs of the outbreak, disease transmission, outbreak control and media coverage.

Shortly afterwards, we undertook a training workshop in collaboration with the Federal Ministry of Health. This aimed to:

- Revise essential steps in outbreak management
- Review current systems used in outbreak management & investigation using a SWOT analysis framework, and make recommendations.

The workshop was attended by 25 leads for communicable disease control in Khartoum, Gezira, Kassala, Gedaref and River Nile States. The recent outbreak of Rift Valley Fever was used to construct the scenario (Awad, 2008). The workshop covered the general principles of outbreak management and investigation to set the context and ensure consistency of approach. Group work identified strengths, weaknesses, opportunities and threats in the current system.

The workshop was well received and stimulated a rich discussion, touching not only on outbreaks, but on the wider structure of communicable disease control including surveillance, training, communications, the role of the media and other agencies in partnership working. Recommendations generally fit well with a new epidemiology decision tool for effective surveillance at Federal level. A useful outcome was to highlight variations in systems and practice between different States.

## 4.5 Public health challenges in a post-war area: The Lessons from South Sudan

Emerging from a devastating civil war, South Sudan is one of the underdeveloped regions of the Sudan, with remarkable levels of health inequalities in comparison with that of the country. A child born in South Sudan can expect to live up to 42 years of age, at least 10 years less than their counterpart in the North, according to a report by New Sudan Centre for Statistics and Evaluation (NSCSE) in association with UNICEF (2004). Meanwhile, maternal mortality is more than double in the South (1700 per 1000) than in the North of the country.

Among others, the following remain major health challenges in South Sudan: Access to safe drinking water and improved sanitation; Lack of skilled workforce (50% estimated available); Limited health facilities and services; Control of major diseases: especially communicable disease epidemics like cholera and meningitis; Organisational management: leadership and governance; Challenges related to returnees; Continued insecurities in parts of South Sudan and demobilisation from the army; Accidents - especially road traffic accidents relating to the increase in vehicles.

Following the Comprehensive Peace Agreement in the Sudan, the Government of South Sudan was set up in 2005. It had to identify its priorities fairly quickly thereafter. Starting from scratch, many issues were prioritised; including capacity building.

With the range of public health expertise within members of the Sudan Health Consultancy, the group is keen to offer public health support to the Ministry of Health in Juba, South Sudan in areas mutually agreed upon. The group sees one of its strengths around capacity building, an area that could be further explored with partners at the Ministry of Health South Sudan, and in parallel with the Federal Ministry.

## 4.6 Work with clinicians on palliative care

We have proactively initiated work with clinicians to support and establish palliative care in Soba University Hospital. By bringing clinicians together from a variety of disciplines and supported by experts from the diaspora abroad, a new service was set up. Recognising that this will require an environment where quality care continues until the end of life, we intend to engage further with Ministry officials to set the policy context in favour of this work. We also plan to gauge interest in South Sudan given high levels of need e.g. with HIV.

## 4.7 The Peoples-Uni (http:// peoples-uni.org)

One of the major barriers to health in low and middle income countries is the capacity of the public health workforce in these countries. The need to travel abroad for training disadvantages those who cannot afford the costs involved. At the same time, universities in developed

**Table 2 Where are we now? A SWOT Analysis presents a snapshot of the situation**

| | | | |
|---|---|---|---|
| **Strengths** | Huge international support and assistance for developing countries to integrate palliative care in the continuum of chronic disease management particularly HIV/AIDS and Cancer. | 1. Lack of political support /awareness<br>2. Not considered to be a priority area<br>3. Limited resources used ineffectively<br>4. Excellent initiatives for limited numbers of patients<br>5. Low profile in the education and training of health professionals | **Weaknesses** |
| **Opportunities** | 1. A core team of highly motivated practitioners are currently starting the process<br>2. African Palliative Care Association leads on training and development in Africa. | 1. Social and cultural barriers<br>2. Limited appreciation of quality of life support in the prevailing medical models that focus on curative treatment<br>3. Death being a taboo subject shrouded by mystery and fear | **Threats** |

*Source:* SWOT analysis constructed by Dr IMA Awad, SPHNUK Newsletter Nov 2006.

countries charge fees for their distance learning which are higher than can be afforded by the majority who could benefit. The commitment of these institutes to contribute to capacity building in low and middle income countries can be weighed down by their need to meet their business cases.

To this end, the Peoples Open Access Educational Initiative (Peoples-Uni) has been established recently to help build capacity for public health in low and middle income countries. Discussions of the ideas and concepts started in 2006, and by mid 2008 the Peoples-Uni was up and running.

The Sudan Health Consultancy group embraced the initiative from the start and had the privilege of collaborating with Professor Dick Heller, Coordinator of the Peoples-Uni and the steering groups. The group helped with situation analysis and identification of two professionals who were very interested and committed to the cause to act as local contacts for the Peoples-Uni in Sudan. One contact represents the Ministry of Health and the other from academia. One of them now sits in the International Advisory Committee of the Peoples-Uni. The collaboration led to recruitment of four participants from Sudan who completed the maternal health module along with 34 other participants from 7 Commonwealth countries. In the current semester, three out of 112 participants are from Sudan.

The group also invited Professor Heller to one of the group's teleconferences where he discussed and welcomed the ideas of tailoring or developing specific modules addressing the needs of Sudan. The group members volunteered to help with development and facilitation of modules. We have actively contributed to development of the communicable disease module, and continue to help recruit more participants from Sudan.

## 4.8 International Health in Africa

We are also linked in via the Faculty of Public Health to a recent initiative to improve health in Africa. The main focus is on developing public health capacity in Africa and remote assistance in education: e-learning, teaching, and curriculum development.

The Sudanese Public Health Network had the privilege of being invited to participate in this high-level round table discussion held in London on 15 September 2008. We represented our group along with 25 other participants from Nigeria, South Africa, Zimbabwe, and Uganda. Participants also included key people from the UK Department of Health, Faculty of Public Health and London School of Hygiene and Tropical Medicine.

The meeting had three objectives:

- Exploring current initiatives to increase Africa's public health workforce and develop its public health leadership (Edjang & Crisp 2008).
- Build on and strengthen existing global linkages and partnerships between public health service professionals, education and training organizations.
- Formulate the elements of an action plan for sharing best practice, implementing practical strategies to build public health leadership in Africa.

The roundtable recognised the Sudanese Public Health Network as a model of best practice and "what works". The opportunities and recommendations for Sudan from this meeting are to:

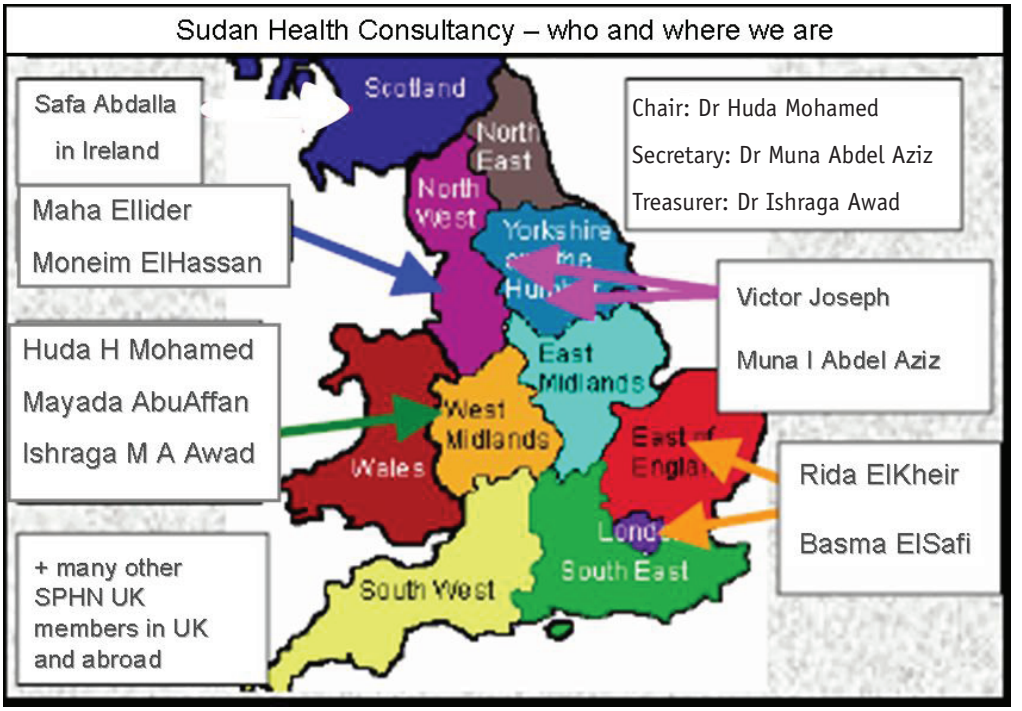
1 Develop a formal link with international initiatives such as this through the International Affairs Office in the Ministry of Health
2 Work with international organisations, universities and health institutes to build health capacity and develop education and training curricula focused on the health needs. Encourage the use of E-learning and create opportunities within the work programme.
3 Develop a national health workforce plan based on the needs of Sudan. It needs to address the problems and identify practical solutions, taking in consideration lessons learnt from other countries' experiences.
4 Invest in training and support of health workers and health alliances as a priority. Funding must cover health service providers, and also the management and support workers who provide crucial services to the health system. Governments also need to invest in training existing health workers, to keep them up to date with changing priorities.

## 5 Next steps – bigger and better

The Sudan Health Consultancy group continue to:

- Raise the profile of Sudanese public health issues and the group effort
- Lobby for resourcing of public health projects in Sudan.
- Work closely with Sudan Federal Ministry of Health and universities in Sudan to advance public health training and skills in Sudan
- Communicate externally via newsletters, journal articles and conference presentations
- Maintain personal and group contacts with officials and individuals in Sudan

We are happy to work with new and existing partners who share our ethos and mission. Please feel free to contact and join Sudanese_Public_Health_Network@yahoogroups.com.

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