Future plans to expand spine care in Botswana

Tuesday May 8, 2018

Dr. Stefan Eberspaecher
Initial meetings with representatives of Botswana Government and local Hospitals


- Signing of MOU
- Mahalapye Clinic Opens
- Shoshong Clinic Opens

Dr. Tiro Mmopelwa

Dr. Hildah Molate

Dr. Sheila Sebopelo

1st Spine Care Conference
2nd Spine Care Conference
3rd Spine Care Conference

Princess Marina Clinic Opens
First Steps

- **Level 5 = Specialized spine center.**
  All diagnostics and therapeutic activities are safe.

- **Level 4 = University hospital setting with departments of orthopaedics and neurosurgery.**
  Most procedures are deemed safe. No consensus was achieved for complex deformity surgeries and complex tumor ablations.

- **Level 3 = A setting equivalent to a city general hospital.**
  Most diagnostic procedures, non-surgical treatment modalities and basics surgeries (i.e., decompression and stabilization) are deemed safe.

- **Level 2 = A setting equivalent to a district hospital.**
  A few non-invasive procedures may be performed. No consensus was achieved on the safety and feasibility of all invasive procedures and some non-invasive modalities, such as treatment of infections, and prescriptions for osteoporosis.

- **Level 1 = Rural clinic setting.**
  No invasive procedures are recommended as they are deemed unsafe and unfeasible. No consensus was achieved for non-invasive procedures in this setting.
Shoshong Village Clinic

- 752 new patients, 7659 office visits
- 34 Volunteers in total since 2011 including 7 one-year CSs
83% seen by another professional for complaint (mostly MOs)
78% clinically significant improvements
85% non-traumatic mechanism of onset
40% presenting with primary complaint of LBP
59% patients have had pain for more than 1 year
87% say pain is worsening or improving
Pain interferes with home or work activities 76%
Average age of 51 years old
59% overweight or obese
Mahalapye District Hospital

1041 new patients, 9577 office visits
34 Volunteers in total since 2011 including 7 one-year CSs
Mahalapye District Hospital

- 84% seen by another professional for complaint (mostly MOs)
- 74% clinically significant improvements
- 91% non-traumatic mechanism of onset
- 56% presenting with primary complaint of LBP
- 65% patients have had pain for more than 1 year
- 87% say pain is worsening or not improving
- Pain interferes with home or work activities 76%
- 75% overweight or obese
Clinical Research Database

This allows us to keep track of our results and improve our care
What do we do?

• Evaluation

• Triaging and referral when necessary (e.g. Orthopaedic Surgery, Oncology)

• Management of appropriate cases
What do we do?

Evaluation
- Careful clinical history
- Identification of Red Flags
- Identification of Yellow Flags
What do we do?

Triaging and referral when necessary
- Orthopedic Surgery
- Oncology
- Rheumatology
- Orthotics and Prosthetics
- Physiotherapy
- Occupational therapy
What do we do?

Management of the appropriate cases
- Exercise
- Cognitive and Behavioural Therapies (CBT)
- Manual Therapy
- Spinal manipulation
- Massage
- Acupuncture
- Yoga and Mindfulness-based relaxation
The Scoliosis Program

• Educate and train teachers and nurses
• Identify children at risk
• Treat children early so that the number of spinal problems are dealt with prior to adulthood
• Improve quality of life of children with scoliosis
• Determine the incidence of scoliosis in Botswana
The Yoga Project
Building local capacity
Where are we now?

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Princess Marina Hospital
What's next?

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Expansion of the program

• Reproduce the community clinic model as in Shoshong
• Institute primary spine care clinics in the hospitals as in Mahalapye District Hospital and soon Princess Marina Hospital
• Coordinate community-based education programs
• Facilitate the training of further expertise
• Work with other key-stakeholders to develop a national framework for the management of spinal conditions
National Referral Framework

• Complete the development of the level 3 and level 4 spine care program in Gaborone
• Establish surgical facilities for advanced spine surgery
• Ensure there are qualified support surgical staff, pre-op and post-op rehabilitation
• Ensure that there are properly trained spine surgeons
• Develop a clear program for referral to the tertiary spine program
• Establish a cognitive-behavioural spine care program for those patients disabled by their spine program
• Integrate with the spinal cord rehabilitation program (Spinalis)
• Ensure availability and criteria for referral to advanced medical specialist care
• We have an opportunity to integrate Botswana’s Spine Care resources!
How can we succeed?

- Creating a positive work environment that sustains morale
- Promoting teamwork and cooperation
- Supporting and developing leadership and initiative
- Maintaining focus on the mission and purpose
- Developing patient centered models
Teamwork Communication

Sustainable

Integrated

Evidence based
“The best leaders don’t just take responsibility for their job. They take Extreme Ownership of everything that impacts their mission.”

*Extreme Ownership: How U.S. Navy SEALs Lead and Win*, p.30

_Jocko Willink & Leif Babin_
Re a leboga!

World Spine Care