Promoting Women’s Well-being through Physical Rehabilitation: The Impact of Integration in Fistula and Maternity Care

September 30, 2020
Female Genital Fistula

• An abnormal opening in the upper or lower female genital tract that causes uncontrollable urinary and/or fecal incontinence

• Up to a million women live with fistula; thousands of new cases per year

• Causes
  – Obstetric
    o Inadequate management of prolonged/obstructed labor
  – Iatrogenic
    o Often from cesarean section or hysterectomy
  – Traumatic injury
  – Cancer/radiation therapy
  – Infection
  – Congenital defect
Fistula Care *Plus* (FC+) Overview

- **Term:** December 2013 to March 2021
- **Countries of current/past activity:** Bangladesh, Democratic Republic of Congo, Mozambique, Niger, Nigeria, Togo, Uganda
EngenderHealth and Fistula

• Through USAID funding, EngenderHealth has supported >44,400 surgical/non-surgical fistula repairs, trained 365 fistula surgeons, and trained >31,100 other health care workers in countries affected by fistula in Africa and Asia.
Speakers

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Promoting Women’s Well-being Through Physical Rehabilitation: The Impact of Integration in Fistula and Maternity Care

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Mama, LLC is a public health and physical therapy consulting firm with expertise in women's health and development.
Objectives

• Examine health through the lens of function and disability
• Understand the practical application of the International Classification of Functioning, Disability, and Health (ICF) framework to form a physiotherapy (or physiotherapy-informed) treatment plan for women with fistula and related conditions
• Introduce the new Training Guide, how to access, and how to utilize in various settings
• Provide a case example of a multi-year capacity building effort at a large tertiary care hospital in Democratic Republic of Congo (DRC)
What is health? What does it mean to be healthy?

• How healthy one person feels or appears is relative and depends on their (and our) definition of health.

• 1946: World Health Organization (WHO) defines health as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.”
What is health? What does it mean to be healthy?

• Since then ...
  • Epidemiologic shift from acute illness and infectious disease to non-communicable and chronic disease
  • Growing research demonstrates multi-dimensional aspects of health from the molecular level to the individual, their environment, and society at-large

• 21st century: Some scholars propose a new definition of health as “the ability to adapt and self-manage.”

  Huber 2011, Lancet 2009
The ICF model

International Classification of Functioning, Disability, and Health: A Conceptual Framework

WHO 2002
Why physiotherapy?

“...experts in developing and maintaining people’s ability to move and function throughout their lives.”

“...advanced understanding of how the body moves and what keeps it from moving well, they promote wellness, mobility and independence.”

“...treat and prevent many problems caused by pain, illness, impairments and disease, sport and work-related injuries, ageing and long periods of inactivity.”
ICF model applied to reproductive morbidities:

**HEALTH CONDITION**
Reproductive Morbidities:
Obstetric Injury, Pelvic Floor Fistula, Pelvic Organ Prolapse, Incontinence

**IMPAIRMENTS IN BODY STRUCTURES & FUNCTIONS**
Pelvic structural damage
- Damage or destruction of organs, connective tissues, bony support
- Fibrosis/stenosis
- Infertility
Neurologic and/or musculoskeletal damage
- Pelvic, abdominal, leg muscle weakness
- Joint contractures
- Loss of/impaired sensation
  Impaired bladder/urinary function
  Impaired bowel/digestive function
Pelvic, abdominal, hip, back and/or leg pain

**ACTIVITY LIMITATIONS**
Sexual difficulties/dysfunction
Difficulty toileting & maintaining personal hygiene
Mobility problems
- Inability or difficulty walking, transferring in/out of bed, to/from chair or floor, lifting, carrying, etc.

**PARTICIPATION RESTRICTIONS**
- Loss of livelihood
- Limited employment opportunities
- Loss of status in family & community
- Divorce
- Social isolation

**CONTEXTUAL FACTORS**
**Personal:** Age, gender, education, profession, habits, lifestyle

**Environmental:**
- Physical (terrain, type of dwelling, exposure to pollutants/indoor cooking fires, accessibility to healthcare)
- Social (Family, friend, other support networks)
- Attitudinal (Beliefs, local customs/practices)
Status of rehabilitation services

Number of physicians per 10,000 in Sub-Saharan Africa

Number of rehab professionals per 10,000

- Estimated 92% of global burden of disease is related to causes requiring some level of physical rehabilitation
- Only 50% of countries are able to provide rehabilitation to approximately 20% of those in need (Gupta et al)
- Evidence and advocacy for health-related rehabilitation services to have the same priority in health systems as conventional medical treatments (Howard-Wilsher, et al. 2015)
Physiotherapy capacity building

- 2013: Strategic planning and DRC site visit

In partnership with FC +:
- 2015-16: Physiotherapy integration; field support in DRC and Nigeria
- 2018-19: Training guide development
- 2020-21: Translation*, distribution, implementation

* French, Swahili, and Portuguese editions in process; available early 2021
Physiotherapy in the context of fistula services

- Research limited to three publications
  - Demonstrate feasibility of integrating physiotherapy services into fistula care
  - Suggest positive impact on post-operative outcomes
  - No RCTs or long-term follow-up studies conducted
  - All emphasize isolated pelvic floor muscle training with no mention of manual or dilator therapies or functional exercise

- Guidelines from WHO and International Federation of Gynecologists and Obstetricians (FIGO) recommend including physiotherapy in comprehensive fistula care programs
  - However, no protocols or training guidelines published to describe recommended content of physiotherapy programs

Keyser 2014, Castille 2014, Brook 2013, de Bernis 2007, FIGO 2011
Implications and potential benefits

- Inform physiotherapy service integration for fistula care programs across Africa and south Asia
  - Aspects of health education, clinical skills training, and physiotherapy-informed interventions may be utilized to develop or enhance services at various facilities
- Quantify level of function and disability experienced by women with fistula and related morbidities (WHODAS, QoL measures)
  - No study to date has reported on the impact of fistula on global function
- Reduce costs associated with repeat surgery, long-term medical management, and disability
- Reduce burden of disability and improve quality of life for women
  - May enhance economic potential of women through physical readiness to gain employment and fully participate in the lives and activities of their families and communities
  - May have far-reaching economic impact from individual to local and state level
Implementing Physical Rehabilitation Services into Comprehensive Fistula and Maternity Care:

A TRAINING GUIDE FOR HEALTH CARE WORKERS
Access the Training Guide

Implementing Physical Rehabilitation Services into Comprehensive Fistula and Maternity Care: A Training Guide for Health Workers

Physiotherapy Capacity Building for Women’s and Pelvic Health Services
Training Guide User Survey

Please note
Fields with an * are required; all others are optional. The information gathered from this survey may be used for research or evaluation purposes. All personal identifying information will be withheld, should this information be published in academic journals, conference proceedings or lectures.
How to use the Training Guide

- Each section begins with a short description of the topics covered and the intended audience.

- Supplemental materials include sample intake and documentation forms, validated patient outcomes measures, and a site readiness survey.
Section 1: Pelvic Anatomy + Function

A review of the body's systems and their relationship to women's health

This section provides an overview of female pelvic anatomy and physiology. A basic understanding of functional anatomy will serve as a foundation to better understand principles of rehabilitation and physiotherapy treatment techniques utilized for different women's health conditions. For healthcare workers with previous training in obstetrics and gynecology, some of this information may be a review. Note that this section was designed for healthcare workers to use as patient education. Handouts may be reproduced in part or in full to provide education at the community or individual level.
Introduction to Female Pelvic Health

Many women’s health problems affect the body structures and functions located in the pelvic area. It is important to understand healthy function of this area of the body, in order to better identify problems or dysfunctions. The information that follows provides an overview of female pelvic health and function. Concepts and terminology are introduced that are integral to the physical rehabilitation and restoration of pelvic health.

What is the pelvic floor?

The pelvic floor includes the muscles, connective tissues (ligaments, tendons, fascia), blood vessels, and nerves that provide support to and aid in normal function of the pelvic organs. In women, the pelvic organs include the bladder, the uterus, and the rectum. The pelvic floor muscles, connective tissues and the pelvic organs are nested inside the bony pelvis.¹

Pelvic floor muscles

The pelvic floor muscles are a group of muscles that attach to the pelvic bones - the pubic bone in the front, the tail bone in the back and the sitz bones on either side. There are 16 voluntary pelvic floor muscles in the female pelvis.² It is not necessarily important to learn the anatomical names for each muscle, but rather to understand how they function together. For those who are interested, the name of the muscles and the anatomic landmarks are labeled in Appendix ¹.

There are 3 layers of pelvic floor muscles¹: From the inside to the outside, these include:

1. a deep, inner layer of muscles that are broad and fill the pelvis, forming the floor of the pelvic bowl;
2. a middle layer of muscles that contains circular shaped sphincter muscles around the urethral opening;
3. a surface, outer layer of smaller muscles
Section 2: Pelvic Floor Disorders – Pelvic Floor Fistula, Pelvic Organ Prolapse, and Urinary Incontinence

Important health conditions affecting women

This section provides background on important pelvic health conditions that significantly impact women, especially those who live in low resource, low income countries. These include Pelvic Floor fistula, pelvic organ prolapse and urinary incontinence. Definitions, causes, and consequences of these conditions are discussed as they relate to physical rehabilitation. For healthcare workers with previous training in obstetrics and gynecology, some of this information may be a review. This section was not designed specifically for patient education handouts; however, you may find useful language for explaining these health conditions to women and their communities.
Female Pelvic Floor Fistula

Pelvic floor fistula (PFF) is an abnormal hole that most commonly forms between the vagina (birth canal) and the bladder, the rectum or both. PFF may also involve holes between the uterus (womb) and the urinary tract (bladder or ureters) and/or the anorectal tract. Other names for this condition include obstetric fistula, genital fistula or gynecologic fistula. These all refer to the same health condition. When the fistula (hole) forms, urine and/or stool (feces) passes through the vagina. A woman becomes incontinent and cannot control this leakage because the vagina is not designed to contain these types of bodily fluids.

A pelvic floor fistula is called an obstetric fistula when it is caused by prolonged, obstructed labor. Prolonged obstructed labor occurs when the fetus is pressed against the pelvic organs and tissues of the pelvic floor for 2 or more days, trapping the tissues between the fetal head and the pelvic bones. This constant pressure leads to tissue death called necrosis, which creates the opening (hole) that most often forms between the bladder or rectum and the vagina, cervix or uterus.

Vesicovaginal fistula (VVF) connects the bladder to the vagina. It can involve the bladder, ureters, urethra, and a small or large portion of the vaginal wall. Women with VVF complain of constant urine leakage throughout the day and night. They may also report that they no longer have the urge to urinate and stop using the toilet altogether. This is because the bladder never fills enough to trigger the urge to urinate.

Rectovaginal fistula (RVF) connects the rectum to the vagina. This type of fistula is less common -- about 10% of fistula cases. Women with RVF complain of fecal incontinence and may report presence of stool (feces) in the vagina. Usually, women with RVF will also have VVF.
Common symptoms of prolapse include:

- Sense of pressure or heaviness in the vagina or pelvis
- Sensation that an object is inside the vagina
- A bulge that may be seen or felt in the vagina or exiting the vaginal opening

These symptoms may get worse at the end of the day, or after long periods of walking, standing or lifting heavy loads. Urinary incontinence, constipation and pain or discomfort with sexual activity are also common symptoms among women with prolapse. These physical symptoms may limit a woman’s ability to perform her daily household activities and work duties.

Four Types of Prolapse

- Cystocele
- Rectocele
- Uterine
- Enterocele

Stages of Pelvic Organ Prolapse

Pelvic organ prolapse is described by the organ or organs that are prolapsed. It is also categorized by the stage of the prolapse. The stage indicates the degree or severity to which a pelvic organ has moved from its normal resting position into the vaginal canal.

In order to assign a stage to the prolapse, the examiner starts by identifying the hymen, or hymenal remnants, and uses this as an anatomical marker to grade the prolapse.

- Stage 0: No evidence of prolapse
- Stage I: The lowest portion of the prolapse is more than 1 cm above the hymen
- Stage II: The lowest portion of the prolapse comes approximately to the level of the hymen
- Stage III: The lowest portion of the prolapse comes more than 1 cm below the hymen, between the hymen and the opening of the vagina
- Stage IV: The lowest portion of the prolapse exits the opening of the vagina
Section 3: Introduction to the International Classification of Function, Disability and Health

The ICF Model

Section 3 introduces a framework for understanding how a health condition, such as pelvic floor fistula or pelvic organ prolapse, impacts a woman’s ability to participate in daily life. All members of the health care team will benefit from understanding this functional perspective on health. This framework assists health care workers in identifying the factors that lead to poor functional outcomes and disability, which in turn helps to better direct interventions, including medical or surgical treatment, physiotherapy, counseling, family or community education as some examples. By doing so, all members of the health care team may contribute to alleviating disability and improving the quality of life for all women.
Promoting woman-centered care using the ICF

The primary aim of fistula surgery is to close the hole and restore continence, so that the woman with fistula does not leak urine or stool continuously. The primary goal of physiotherapy and rehabilitation is to identify physical factors, such as muscle weakness, incoordination and decreased flexibility and how these impact a woman’s ability to function in daily life. Rehabilitation requires that we ask a woman about what she can and cannot do for herself, her family or her community and about her personal goals for treatment. We might ask her:

What does success look like for you? What self-care activities, family roles or community responsibilities would you like to be able to do that you currently have difficulty with or cannot do?

Her answers to these questions help to guide physiotherapy treatment and will help both the patient and the health care worker to know when treatment has been successful.

Case Study 1: Pelvic Floor Fistula

Esperance is a 24-year old woman who lives in a rural village in Rwanda. She experienced obstructed labor when she was 18-years old. She labored for 2 days, and on the 3rd day arrived at a health clinic, where the doctor performed a Cesarean section to deliver her stillborn baby. Soon after, she noticed that she was leaking urine constantly. She became depressed at the loss of her baby and further isolated due to the urine leakage. Her husband divorced her, and she went to live with her mom and siblings. Over the years, she became very sedentary, keeping to herself and sitting or lying down for long periods, trying to contain the urine as best as she could. She developed weakness and pain in her pelvis, hips and low back.
Treatment Options

Esperance was examined at the health center, and the doctors told her that she did not have another fistula and would not need another surgery at this time. She may benefit from physiotherapy interventions to reduce her symptoms and improve her quality of life. These include:

1. Patient education: Teach Esperance about her pelvic anatomy and function in terms she can understand. Use the pictures in Sections 1 to describe normal pelvic floor function and to review healthy bladder habits. Explain that the exercises and behavioral changes you will teach her can help to improve her pelvic floor function and reduce her symptoms.

2. Follow the instructions for Timed voids (Section 5) and teach Esperance to follow a Fluid schedule (Section 5). Explain to her that restricting her fluids will decrease her bladder capacity and may worsen her symptoms. Help her to understand that it is important to drink enough clean water at regular intervals to train her bladder function.

3. Help Esperance with constipation management (Section 1). Ensure she is eating enough fiber and drinking enough water. Teach her proper toilet position to aid with bowel movements. Encourage her to walk and practice her exercises daily; this will help to stimulate regular bowel movements.

4. Instruct Exercises for pelvic pain, urinary urgency, and urgency urinary incontinence (Section 5).

5. Explain the importance of Aerobic exercise (Section 5), such as daily walking for 30 minutes, to improve overall health and increase circulation to her pelvic floor to improve its functioning.

6. Instruct Massage techniques for abdominal scars (Section 5). Esperance may learn how to self-massage her abdominal scar. This will help to decrease pelvic pain, and may improve the function of the pelvic floor by restoring the mobility of the muscles and connective tissues.

Esperance may benefit from one or a series of treatment sessions with a physiotherapist or other health worker who has been trained in the treatment techniques described above. It is helpful to repeat this information and to have her repeat it back to you to ensure she understands what she is supposed to do. You may also print or draw pictures of the exercises, massage techniques and other instructions.
Section 4: Patient Interview and Physical Examination

Section 4 is intended for healthcare workers who have completed clinical training at a university or technical school, including a medical, nursing or physiotherapy program. Physical assessment techniques are described in detail for reference. It is advised that clinicians participate in individual or small group training with a physiotherapist experienced in pelvic health and pelvic floor evaluation.* It is also helpful to practice these techniques with a healthy population, such as another health care worker who understands the goals for the physical examination and who can provide feedback about the clinician’s interview and palpation skills. Healthcare workers who are not trained in providing direct patient care should not attempt the evaluation techniques in this section, particularly the internal pelvic floor examination.

*The authors of this training guide may be contacted by institutions or hospitals that would like to receive a visiting pelvic health physiotherapist to work with designated health care staff (physiotherapists, gynecologists, nurses, midwives, etc.) to build knowledge, skills and capacity for pelvic rehabilitation and physiotherapy. Appendix 3 includes a site readiness survey and a list of minimum necessary equipment for pelvic floor physiotherapy integration. Please include the completed survey in your correspondence.
Patient Interview: Pain Assessment

Pain is a very complex phenomenon that is impacted by many factors. In fact, the ICF framework may be applied to pain as a health condition. Consider how the interaction of body structures and functions, activity limitations, participation restrictions, and contextual factors might influence the impact of pain on an individual’s life.

It is important to ask each woman whether she experiences pain in her body, and if so, the location(s) and severity of pain. You may find it helpful to use a body diagram to mark the areas of pain.

- Because we are interested in pelvic health, we focus on pain and symptoms in the abdomen, low back, hips, and/or pelvis, including internal pelvic pain that occurs with sexual activity, urination, bowel movements, or other daily activities. It is also important to note if the patient complains of pain in other body parts. She may be referred for general physiotherapy to address those problems.

You may find it helpful to ask the patient to report if she hurts ‘a little’ or ‘a lot,’ during which activities she experiences the pain, and any activities that increase or decrease the pain.

Some hospital and clinic settings use a 0-10 scale, where 0 is no pain and 10 is severe pain. Sometimes it can be helpful to monitor pain, and how it changes with treatment. However, using this scale may not be appropriate in all settings or for all patients.

Patient Interview Questions: Do you have any pain? If yes, where is the pain located? Right now, at rest, do you have pain? Can you give your pain a number, if 0 is no pain at all and 10 is pain that is so severe that you need to see a doctor? Or, is it a little pain or a lot of pain? Is there anything that makes your pain better? Is there anything that makes it worse? Does it occur with urination? Bowel movements? Sexual stimulation or sexual intercourse? Are there any other activities that bring on your pain, such as walking, lifting, household activities?

Incontinence Interview Questions\(^1\,2\)

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<thead>
<tr>
<th>QUESTION</th>
<th>PATIENT RESPONSE</th>
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<tbody>
<tr>
<td><strong>Stress Incontinence</strong></td>
<td>Do you experience loss of urine (incontinence) with certain movements or activities, such as coughing, sneezing, laughing? Lifting? Carrying a medium or heavy load? Running? Jumping? Dancing? Singing? Yelling? Sexual intercourse? Any other activities? Have you stopped doing any of these activities because of urine leakage?</td>
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<tr>
<td><strong>Urge Incontinence</strong></td>
<td>Do you leak urine when you have the urge to urinate? Do you leak while walking to the toilet? Are you able to hold the urine until you reach the toilet?</td>
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<tr>
<td><strong>Urinary Urgency</strong></td>
<td>Do you feel the sudden, extreme urge to urinate and must quickly run to the toilet?</td>
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<tr>
<td><strong>Urinary Frequency</strong></td>
<td>How many times per day do you visit the toilet to urinate?</td>
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<tr>
<td><strong>Nocturia</strong></td>
<td>Do you wake up in the middle of the night to urinate? If so, how many times?</td>
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<tr>
<td><strong>Nocturnal Enuresis</strong></td>
<td>Do you leak urine during the night? Do you wake up and your bed/underwear is wet?</td>
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<tr>
<td><strong>Incomplete voids (Post-void dribble or leakage)</strong></td>
<td>Immediately after you visit the toilet to urinate, do you dribble or leak urine? Do you leak a few drops when you stand up from the toilet or as you walk away?</td>
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<tr>
<td><strong>Number of drinks/Amount of water intake per day</strong></td>
<td>How much water do you drink per day? (If the patient cannot indicate number of liters, write in number of cups of water she drinks and estimate number of liters based on her description)</td>
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<tr>
<td><strong>Caffeine intake</strong></td>
<td>Do you drink coffee, tea, or caffeinated sodas? If so, how many cups per day?</td>
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<tr>
<td><strong>Incontinence Outcome Measures</strong></td>
<td>Note the outcome measure, date completed, and score</td>
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</tbody>
</table>
Abdominal and Pelvic Floor Assessment

For the Abdominal and Pelvic Floor Assessments, have the patient lie down on her back with her knees bent. If available, use a pillow, cushion or rolled towel or fabric to support her head and neck. Cover the patient with a blanket, sheet or piece of fabric, so that she is not lying on the examination table with her genitals exposed for the duration of the exam. If she is leaking urine continuously, use an absorbent pad, sheet or cloth under her pelvis to contain the urine.

Before you begin the exam, explain to the patient what you plan to do. If available, use anatomical posters and/or models to describe the role and function of the female pelvis:

Patient instruction: In a moment, I am going to examine the muscles and tissues inside the pelvis. First, I will look at and feel the tissues outside of the vagina. Then, I will gently insert one gloved (and lubricated) finger to touch the muscles inside the pelvis. I will ask you if one or more areas are painful, and then if it is comfortable for you, I will ask you to squeeze and relax the muscles several times. It is important for me to know what you are feeling and if at any time you need me to stop, that is okay.
Section 5: Physiotherapy Treatment Techniques

Section 5 provides sample treatment protocols based on the patient interview and findings of the physical examination detailed in Section 4. The treatment techniques included in this section serve as guidelines and may be adjusted according to the individual needs of each woman. It is important to evaluate how each patient responds to treatment, and to alter the treatment plan if symptoms worsen or do not improve. This section includes patient education and behavioral modifications for optimal pelvic health, exercise suggestions for specific physical impairments or symptoms, and descriptions of manual therapy (massage) techniques. Information on healthy movement and body mechanics for optimal pelvic floor health is also included. While these guidelines are very important after pelvic surgery, all women may benefit from practicing good posture and healthy movement to minimize the strain on the pelvic floor. Appendix 4 also provides a summary table of treatment options based on the physical impairments associated with fistula, pelvic organ prolapse and general maternity care.
Breathing Exercises

- Recall that the movement of the pelvic floor is coordinated with the movement of the respiratory diaphragm. Learning this breath sequence will help to restore movement and function of the pelvic floor and is beneficial for all women.

- Breathing exercises will encourage relaxation and will help to decrease pain or discomfort. It may be beneficial to teach these exercises BEFORE the internal pelvic examination and to encourage the patient to breathe deeply throughout the internal examination to reduce discomfort or anxiety she may be experiencing.

- During this exercise, the abdomen rises and the ribcage expands outwards during the INHALATION. The abdomen draws in and the ribcage narrows during EXHALATION.

- It is important to observe the movement of the chest and abdomen during this exercise. You may notice strain in the upper chest and neck muscles as the patient inhales and/or the abdomen push out forcefully on the exhale. This requires that you correct the breathing pattern. Below are some verbal cues you may give to improve breath sequence:
  
  o Breathe or sniff in through the nose. Blow out gently through pursed lips (make a kissing motion with the lips to encourage pursed lips).
  
  o Make a sound, such as ‘choooo,’ or hum out loud on the EXHALE.

Exercises for flexibility, strength and pelvic health

This series of exercises may be beneficial for all women who are able to move about independently. It requires women to be able to move on and off the floor and to stand without assistance. These may be practiced pre-operatively and post-operatively. If a catheter is in place post-operatively, it is advised to wait until the catheter is removed.

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<th>Breathing exercise</th>
<th>Practice 10 breaths.</th>
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<tr>
<td>Lie on your back with your hands on your abdomen, fingers pointing inward, knees bent, feet resting flat on the floor.</td>
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<tr>
<td>Slowly inhale, expanding your ribcage so that your fingers slide apart.</td>
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<tr>
<td>Exhale, allowing your ribcage to narrow and your fingers slide closer together.</td>
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<tr>
<td>It may be helpful to make a sound as you blow out through your mouth, such as ‘shoooo.’ You may also practice blowing through a straw or narrow tube</td>
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<tr>
<th>Trunk rotation</th>
<th>Hold 10 seconds. Repeat 10 times on each side.</th>
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<tr>
<td>Lie on your back with knees bent and feet resting on the floor.</td>
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<tr>
<td>Slowly rotate your knees down towards the floor until you feel a stretch in your trunk and hold. Repeat on opposite side.</td>
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<td>Keep your back and shoulders in contact with the floor.</td>
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<th>Knee to chest stretch</th>
<th>Hold 30 seconds. Repeat 3 times on each side.</th>
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<td>Lie on your back with your legs straight.</td>
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<tr>
<td>Slowly lift one leg and hug your knees toward your chest until you feel a gentle stretch in your low back and hold.</td>
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<td>Keep you back relaxed and your opposite leg flat on the floor.</td>
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<th>Pelvic floor stretch</th>
<th>Hold 30-60 seconds. Repeat 2 times.</th>
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<tr>
<td>Begin lying on your back with your legs bent and feet resting on the ground.</td>
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<tr>
<td>Lift your legs off the ground with your knees bent, support the knees with your hands &amp; let them fall outward, relaxing your pelvic floor muscles.</td>
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<tr>
<td>Make sure to continue breathing evenly. This should be a gentle stretch.</td>
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Panzi General Reference Hospital, Bukavu, DRC

CASE STUDY
Panzi General Reference Hospital
Bukavu, DRC

- Dr. Denis Mukwege
  - **Medical Director, 2018 Nobel Laureate**
- Team of 12 gynecologic surgeons + nurses, social workers, psychologists, physiotherapist
- Average 5 surgical cases per day
  - 3-4 fistula + 1-2 other gyn cases
- 983 fistula repairs performed: 2009-2012
  - Average 20-25 cases per month
- Average 10 new sexual violence cases per day
  - 200 of 350 beds devoted to these patients
- **2533 women and girls treated for complex gynecologic injuries resulting from sexual trauma and/or obstructed labor (2015)**
- Partner in USAID-funded EngenderHealth-led fistula programs for over 15 years
Program and material development

- Integration of specialized physiotherapy services began in 2013 with increased financial and programmatic support for training efforts in 2016 from USAID’s EngenderHealth-led FC+ project

**Physiotherapy considerations in fistula and related care**

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<td>Minimize persistent/long term disability</td>
<td>Pelvic/abdominal scarring</td>
<td>General deconditioning</td>
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Program design and training – Multi-disciplinary

- Gynecologists and fistula surgeons trained in pelvic floor muscle (PFM) evaluation and basic mobility assessment to formulate diagnosis and inform treatment pathway
Program design and training – Multi-disciplinary

- Physiotherapist received 1:1 clinical training in manual therapy, vaginal dilators, exercise, and patient education
Program design and training – Multi-disciplinary

- Physiotherapist, lead physician, and 15 nurses/social assistants received training on patient education and group-based exercise
Early results and program strengths

- Early results and program strengths
  - **Task-sharing/Task-shifting**
    - Dedicated physician, nursing, social work and PT staff provide various aspects of rehabilitative care
  - 5-50 women participate in group exercise sessions, 2-3x/week
  - Targeted 1:1 physiotherapy selectively provided to 1-15 women, 1-5x/week
  - Staffing priorities reflect perceived importance and impact of physiotherapy services
  - Clinical observations of program success
    - Reported improved post-surgical functional outcomes
    - Keen interest in further training to cultivate advanced clinical skills
Health Care Provider Perspectives and Experiences

DR. KENNY RAHA
DR. RACHEL KINJA
Dr. Kenny Raha:

VIDEO & AUDIO CAN BE ACCESSED HERE
Dr. Rachel Kinja:

“Since 2018, I have been leading the Physiotherapy department in the Panzi Hospital. In our practice, we guide the Physiotherapy sessions to all patients admitted to PANZI hospital for urinary fistula, for first degree prolapse. We work in collaboration with the physiotherapist of the hospital's kine department.”
Dr. Rachel Kinja:

“Physiotherapy activities have been implemented among all female staff engaged in the hospital, women engaged in the Panzi Foundation as well as at V-DAY. Women are involved and love to participate in the sessions. Among them, we think of choosing those which can serve as focal points or constitute a small committee which ensures the lead of the sub-groups.

Physiotherapy sessions are systematic in women presenting to the ANC department from the 36th WA with the aim of preparation for childbirth. It is still difficult for us to follow up in Postpartum.”
Dr. Rachel Kinja:

“The bulk of the material we use in our service is a donation sent by our collaborators Laura and Jessica. The hospital, the PANZI foundation, and the V-Day house provide us with others.

We carry out the sessions three times a week according to a fixed schedule. The morning sessions (8:00 a.m. to 9:00 a.m.) are intended for patients with Fistulas and Prolapse. From 12:00 p.m. to 1:00 p.m. we perform sessions for hospital staff on Tuesday and Friday. From 3:00 p.m. to 4:15 p.m., sessions are held at the Foundation Panzi every Monday and Thursday.”
Dr. Rachel Kinja:

“At the hospital we have a room problem. We are obliged to do sessions in multiple groups, which is tiring, and takes longer.

Concerning the current context of COVID-19, we have stopped the physiotherapy sessions for the staff, and have maintained the sessions for the patients. We will resume at the beginning of this month of September and we are planning to organize a major activity to promote our activities at the provincial level to train and inform our community.”
Thank you!
Obstetric fistula: The role of physiotherapy: A report from the Physiotherapy Committee of the International Continence Society

Improving Quality of Life for Women with Incurable Fistula: A Fistula Care Plus and TERREWODE Research Partnership in Uganda

WHAT IS FISTULA?
A genital fistula is an abnormal opening in the upper or lower urinary tract through the vulva, vagina, or anal sphincter, resulting from childbirth or obstetric interventions. Fistula is caused by injury to the pelvic organs and tissues when complications arise during childbirth.

Supplement Article
Rehabilitation and reintegration programming adjunct to female genital fistula surgery: A systematic scoping review

Abstract
Background: Female genital fistula is associated with significant physical, psychological, and socioeconomic consequences; however, knowledge and practice gaps exist around services adjunct to fistula surgery.

Objectives: To examine rehabilitation and reintegration services provided adjunct to female genital fistula surgery, review existing programming and outcomes, and identify areas for additional research.

Methods: We conducted a systematic scoping review of literature from January 2005 to June 2014. Two reviewers screened articles, extracted data using standardized methods. Selection criteria: Research and programmatic articles describing service provision in addition to female genital fistula surgery were included.

Data collection and analysis: Of 8374 published articles and 2032 unpublished documents identified, 16 and 47, respectively, were included.

Results: Programming identified included restoration of relationships, physical therapy, social support, psychosocial counseling, and economic empowerment, largely in sub-Saharan Africa. Interventions were noted to improve physical and psychosocial health. Community-based interventions support holistic fistula care through adjunct reintegration programming, improving the evidence base required for implementing robust clinical designs, increasing reporting, data, and standardizing outcomes across studies. Increased funding for holistic fistula care is critical for dismantling and supporting programming to ensure positive outcomes.

Keywords: Female genital fistula, Fistula surgery, Rehabilitation, Reintroduction, Scoping review, Meta-synthesis, Systematic review.
Thank you!

www.fistulacare.org
www.engenderhealth.org