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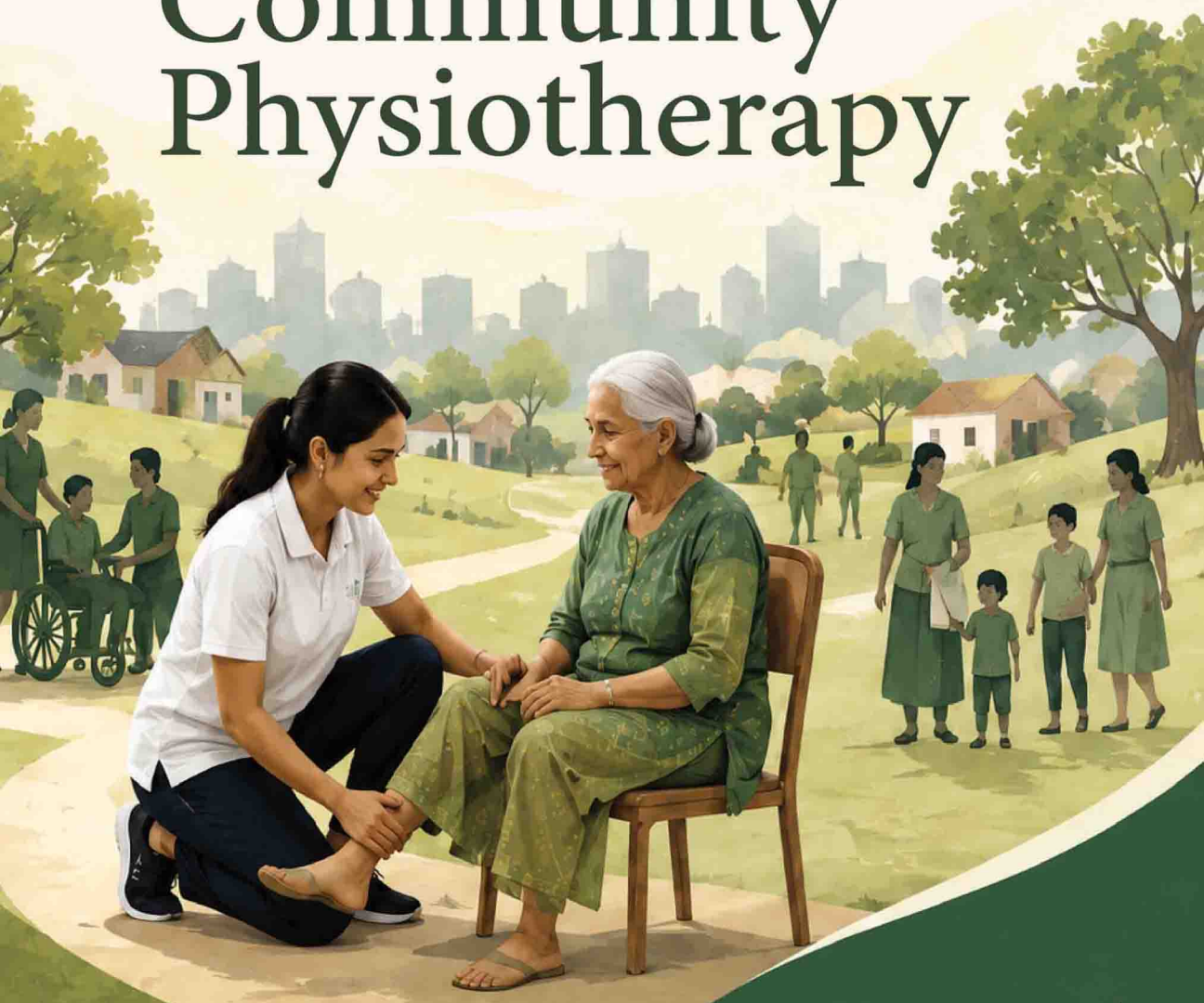
Manual of Assessment in Community Physiotherapy



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Forewords
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JAYPEE

CONTENTS

1. Physiotherapy Assessment in Women's Health **1**
Sonali Vispute, Kshipra Shastri

2. Physiotherapy Assessment in Geriatrics **15**
Kunal Nagwani, Rudalee Husale

3. Physiotherapy Assessment in Industrial Therapy **23**
Shrikant Sunil Sant, Aniruddha Thorat

4. Physiotherapy Assessment in Urinary Incontinence **27**
Kshipra Shastri

5. Physiotherapy Assessment in Obesity and Fitness **33**
Prachi Mhaske, Kshipra Shastri

Annexures

I. Short Physical Performance Battery Protocol and Score Sheet 37
II. The Activities—Specific Balance Confidence (ABC) Scale 43
III. Functional Reach Test 45
IV. Timed "Up and Go" 46
V. Tinetti Performance Oriented Mobility Assessment 47
VI. Berg Balance Scale 51
VII. Physical Performance Test 56
VIII. Dynamic Gait Index 57
IX. 6-Minute Walk Test 58

Suggested Reading **61**

1 Physiotherapy Assessment in Women's Health

Sonali Vispute, Kshipra Shastri

OVERVIEW

Antenatal care (ANC) is vital for reducing adverse pregnancy outcomes and maternal mortality rates worldwide. It aims to ensure that expectant mothers receive periodic examinations, guidance, and assistance. Approximately 800 women die daily due to preventable complications during pregnancy. Physical inactivity ranks as the fourth leading cause of global mortality, contributing to 5.3 million premature deaths annually. Among pregnant women, physical inactivity independently raises the risk of maternal obesity, gestational diabetes mellitus (GDM), and gestational hypertension (GHTN). Despite advancements in physiotherapy, maternal mortality remains a significant global concern, necessitating urgent attention from the healthcare sector. Physiotherapy, with its various specialized areas, has experienced significant growth in recent decades and offers substantial benefits for women's health. It has demonstrated the ability to enhance the quality of life for patients experiencing symptoms related to urinary and/or fecal incontinence, chronic pelvic pain, and sexual disturbances, thereby addressing functional issues that have serious emotional and social repercussions.

Need for Physiotherapy Assessment

The primary aim of antenatal clinics is to extend health promotion and preventive services to pregnant women. An integral part of this effort is promoting physical exercise during pregnancy to prevent complications. Physiotherapy assessment, conducted at the initiation of physiotherapy services and periodically thereafter, offers therapists essential insights into the necessity and effectiveness of therapeutic interventions. Such assessments are vital for devising treatment plans, guiding clinical decision-making, selecting interventions, and implementing effective treatment strategies for clients.

ANTENATAL PHYSIOTHERAPY ASSESSMENT

Kshipra Shastri

Demographics

- Age
- Occupation
- Address
- Marital status (single, married, divorced) (effect on women's psychological status):
  - Duration of marriage
  - Consanguinity marriage

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- Husband occupation
- Husband age (parental age above 40 likely to increase to fetal risk)
- Education (important for parental education)
- Date of admission
- Gestation (GA)
- Expected date of delivery (Naegele's rule) add 7 days to the first day of LMP, subtract 3 months, and add 1 year

  Example:

  LMP: 27/8/2014

  EDD: 3/6/2015

Chief Complaints

Examples

- Period of amenorrhea
- Nausea
- Vomiting
- Musculoskeletal problems
  - Low backache
  - Radiating pain
  - Numbness or tingling sensations
  - Cramp
  - Frequency of micturition
  - Weakness
  - Blood pressure
  - Swelling in both the limbs

History of Present Condition

Elaboration of the chief complaints as regard to their onset, duration, severity, use of medications, investigations, and progress, is to be made.

Pain history: If applicable according to the chief complaints (on rest, on activity)

Obstetrical History

- **Type of conception:** Natural/artificial, planned/unplanned
- **Conformation of pregnancy:** (When, where, and how it was confirmed)
- **Weight:** Before pregnancy _____ at this instant _____
- **Immunization:** Give TT2 before 36 weeks
- **Confirmation of pregnancy by** _____
- **GPLA [Gravida, Parity, Living, Abortion, Medical termination of pregnancy (MTP)]**

  G: The total number of pregnancies regardless of how they ended

  P: Number of live births at any gestation or stillbirths after 24 weeks of gestation
- Have there been any other problems in this pregnancy?

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- **History of any disease during pregnancy?**
  - High BP
  - Diabetes
  - Heart disease: Breathlessness on exertion, palpitation
  - Tuberculosis: Cough> 2 weeks, blood in sputum, prolonged fever
  - Renal disease
  - Epilepsy: Convulsions
  - Asthma: Attacks of breathlessness
  - Jaundice
  - Malaria
- History of Rubella or cytomegalovirus, toxoplasmosis infection
- Postural hypotension
- Any trauma during pregnancy
- Any itching over the perineal area
- Any bleeding, contractions, or loss of fluid vaginally

History of Previous Deliveries

- Date (month/year)
- Outcome (live birth, stillbirth, preterm, abortion, ectopic, vesicular mole)
  [Full term normal delivery, lower segment cesarian section (LSCS), episiotomy]
- Duration of pregnancy
- Method of delivery
  - Health status of previous baby (any congenital deformity)
  - A history of preterm premature rupture of membranes (PPRM) is (also more likely to recur in the next pregnancy)
  - Gap between each child
  - Type of labor (induced or spontaneous)
  - History of breastfeeding (postnatally)

Menstrual History/Gynecological History

- Age of onset of first menstruation
- Length of cycle (3–4 days)
- Regularity-regular/irregular
- Clots, blood flow (amount of bleeding)
- *Amount of flow*: Average/scanty
- Dysmenorrhea (if any)
- Relief measures for dysmenorrhea
- *Contraceptive history:* Oral contraceptives taken during early pregnancy have been associated with birth defects, and retained intrauterine devices (IUDs) can cause early pregnancy loss, infection, and premature delivery.
- Date of LMP (last menstrual period)(1st day of last menstrual period)

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Past medical history: Any history of TB, bronchial asthma, hypertension, diabetes mellitus, hyperthyroidism or hypothyroidism, cardiac problems, HIV, anemia (Sickle cell anemia), any history of seizures or convulsions, autoimmune disorders like Myasthenia gravis.

Surgical history: Any surgical procedure done during delivery or previous deliveries).

Personal history: Use of drugs such as cocaine, and alcohol (Studies show that consumption of cocaine, alcohol, or tobacco during pregnancy results in brain structure changes in the fetus which can persist into early adolescence);

- *Smoking habits:* Tobacco, cigarette. The chance of ectopic pregnancy is 20% higher in women who smoke during pregnancy.

Drug history: Any Rh compatibility injections taken during a previous pregnancy.

Family history: History of twin pregnancy, history of congenital defects present in any family member.

Partner's health history: To rule out and prevent genetic complications, genetic abnormalities, and disorders, blood type, chronic diseases, and infections.

Socio-economic history: Occupation of the client and her husband, number of family members, caste and economic status of the client.

Occupational history: Job profile, working hours, posture in which she works, risk factors in the current occupation.

Environmental History

Psychological history:
Any emotional disturbances, anxiety or depression, any stress during pregnancy, knowledge about the pregnancy, and physiological changes, which occur during pregnancy.

On Observation

- Built (ectomorphic, mesomorphic, endomorphic)
- Pallor
- Icterus
- Cyanosis
- Clubbing
- Lymphedema
- Edema
- Trophic changes
  - Posture evaluation
    - Rounded shoulders
    - Increased cervical lordosis
    - Forward head posture
    - Increased lumbar lordosis
    - Hyper-extended knees
    - Weight shifted posteriorly to ankle
  - Gait evaluation (Wide base of support)

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On Inspection

Pregnancy related changes

- ❑ On face, chloasma gravidarum or pregnancy mask (around cheek, forehead, and eyes)
- ❑ On abdomen: Linea nigra (midline from xiphisternum to symohysis pubis)
- ❑ Striae gravidarum (abdominal walls below umbilicus, thighs, and breast)
- ❑ Stretch marks
- ❑ Uterine shape—ovoid (longitudinal/transverse)
- ❑ Contour of uterus—smooth or any fundal notching
- ❑ Conjunctiva and tongue—pallor(anemia), yellowish (Jaundice)
- ❑ Scar marks
- ❑ Contour of uterus
- ❑ Extremities: Ankle edema, capillary refill time, cyanosis

Palpation

- ❑ Temperature variation of skin
- ❑ Tenderness
- ❑ Spasm
- ❑ Swelling

Abdominal Examination

- ❑ Status of abdominal wall protruded/herniated umbilicus suggest diastasis recti
- ❑ Abdominal Girth (This is measured at the lower border of the umbilicus)
  (If the girth gradually diminishes beyond term or earlier, it arouses suspicion of placental insufficiency)
- ❑ Symphysis fundal height [from top of the uterine fundus to superior border of the symphysis pubis (bladder should be empty) using a tape] (After 24 weeks of pregnancy)
- ❑ Period of gestation in weeks according to height
  Obstetric grip (After 24 weeks)—Leopold's maneuvers
  - First Leopold (fundal grip)
  - Second Leopold (lateral or umbilical grip)
  - Third Leopold (Pawlik's grip)
  - Fourth Leopold (pelvic grip)

Breast Examination

- ❑ Symmetry of the breast
- ❑ Nipples: Developed/underdeveloped position: Inverted/Everted
- ❑ Areola: Color, developed/underdeveloped
- ❑ Engorgement
- ❑ Formation of lumps/redness/warmth/tenderness/itching

Musculoskeletal Examination

- ❑ Manual muscle testing
- ❑ Gluteal muscles

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- Perineal muscles
- Range of motion
  - Within the permissible range ballistic movement should be avoided
  - End range pressure should be avoided
  - Hypermobility of joints due to laxity of ligament
  - Restricted trunk movement
  - If edema present the restricted range at the joint
  - Sacroiliac joint dysfunction (diagnosed if at least three of the five tests had positive results)
  - Compression test
  - Distraction test
  - Fortin finger test
  - Posterior pelvic pain provocation test, and
  - Gillet test
  - RS examination
  - PERFECT
    - P—Power on 6-point oxford scale
    - E—Endurance (maximum hold time in seconds)
    - R—Repetition
    - F—Fast (no. of second contractions)
    - ECT—every contraction timed

Alteration of breathing pattern: Chest expansion, specially at the base of thoracic cage after noting crowding of lower if any.

Incontinence Examination/Pelvic Floor Examination

- *Per vaginal manual muscle testing with prior informed consent:* Examination is done by inserting two fingers (index and middle) waring sterile gloves.

Ask client to squeeze fingers as

- Perineometer

Modified Oxford Grading
0—nil contraction
1—flicker
2—weak
3—moderate
4—good
5—strong

- Pad test
- The cough stress test—stress UI symptoms
- The cotton swab test—to evaluate for urethral hypermobility

Outcome Measures

- SF-12
- Edinburgh Depression Scale
- Pregnancy mobility index (PMI) - used to assess the degree of disability

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- Oswestry disability index
- Pelvic girdle pain questionnaire

POSTNATAL PHYSIOTHERAPY ASSESSMENT PROFORMA

Sonali Vispute

Overview

The goal of postnatal physiotherapy examination is to identify and treat the physical changes and difficulties that women have following childbirth. A thorough evaluation of the patient's medical history, including information regarding pregnancy, delivery, and any difficulties, usually precedes this assessment. The physical examination that follows is performed by the physiotherapist, who may assess pelvic floor function, abdominal muscular strength, posture, and general mobility. The integrity and function of the pelvic floor muscles, which can be compromised by childbirth and affect sexual function, and bowel and urine control, are important parts of the examination. Diastasis recti, a separation of the abdominal muscles that can happen during pregnancy, is another condition the physiotherapist might assess. Postural and musculoskeletal evaluations are performed to find any imbalances that may affect everyday activities and to treat any back, hip, or pelvic pain or discomfort. A customized treatment plan is created using exercises and techniques to increase strength, stability, and function based on the results of the examination. This strategy is designed to assist new mothers in achieving the best possible recovery, avoiding long-term issues, and supporting their general well-being as they adjust to life after giving birth.

I. Patient Demographic Details

- Name:
- Age:
- Hospital ID:
- Address:
- Contact Number:
- Date of Assessment:
- Referred By:
- Obstetrician/Gynecologist:
- Gravida/Para Status:
- Occupation:
- Dominant Hand:
- Marital Status:
  - Duration of marriage
  - Consanguinity marriage
  - Age at the time of marriage

II. Subjective Assessment

Subjective assessment helps understand the mother's symptoms, delivery history, functional limitations and psychosocial status.

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A. Chief Complaints
Document the patient's primary concerns in her own words.

Common complaints include:
- ❑ Low back pain
- ❑ Perineal pain
- ❑ Incisional pain (LSCS)
- ❑ Urinary leakage
- ❑ Constipation
- ❑ Weakness/Fatigue
- ❑ Pelvic heaviness
- ❑ Difficulty breastfeeding posture
- ❑ Neck/Upper back pain
- ❑ Difficulty in walking or transfers

Description to include:
- ❑ Onset
- ❑ Duration
- ❑ Nature of pain
- ❑ Aggravating factors
- ❑ Relieving factors
- ❑ Severity

B. Obstetric History include:
- ❑ Gravida (G)
- ❑ Para (P)
- ❑ Abortions (A)
- ❑ Living children (L)
- ❑ Type of pregnancy
- ❑ Gestational age at delivery
- ❑ Antenatal complications
- ❑ Previous deliveries

Importance:
Helps identify risk factors, repeated pelvic floor stress, musculoskeletal adaptations, and high-risk pregnancy outcomes.

C. Menstrual History
- ❑ Age of onset of first menstruation:
- ❑ Length of cycle (1st day of one period to 1st day of next one):
- ❑ Regularity: Regular/Irregular
- ❑ Presence of clots:
- ❑ Blood flow (No. of Pads/Day):
- ❑ Date of LMP (Last Menstrual Period):
- ❑ EDD (Expected Date of Delivery):

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D. History of Previous Deliveries
- ❑ FTND
- ❑ FTND with episiotomy
- ❑ SCS (Mentioning the reason)

E. Health Status of the Previous Baby
- ❑ Weight
- ❑ Presence of birth cry
- ❑ Any congenital abnormality
- ❑ NICU stay if there
- ❑ Reason along with duration
- ❑ Immunization

F. History of Previous Abortions
- ❑ Stillborn or death after birth

G. Present Delivery History include:
- ❑ Date of delivery
- ❑ Mode of delivery
- ❑ Duration of labor
- ❑ Episiotomy
- ❑ Anesthesia used
- ❑ Birth weight of baby
- ❑ Delivery complications

Mode of delivery affects recovery timeline, pelvic floor status, abdominal integrity, and pain patterns.

H. Medical and Surgical History

Assess for:
- ❑ Hypertension
- ❑ Diabetes
- ❑ Thyroid disorders
- ❑ Anemia
- ❑ Respiratory disorders
- ❑ Cardiac conditions
- ❑ Previous surgeries
- ❑ Orthopedic conditions

These conditions influence healing, exercise tolerance, fatigue, and physiotherapy precautions.

I. Drug History:
- ❑ Drugs taken during pregnancy
- ❑ Allergy to any drug
- ❑ History of any contraceptive measures taken (duration)

J. Family History:
- ❑ History of congenital defects present in the family

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K. Socioeconomic History:

- ❑ Number of family members
- ❑ Occupation
- ❑ Economic status of the patient

L. Postnatal Symptoms Screening

1. Pain assessment
   - ◆ Site
   - ◆ Intensity
   - ◆ Nature
   - ◆ Radiation
   - ◆ Aggravating and relieving factors
2. Bladder function
   - ◆ Stress urinary incontinence
   - ◆ Urgency/Frequency
   - ◆ Retention
   - ◆ Dysuria
3. Bowel function
   - ◆ Constipation
   - ◆ Hemorrhoids
   - ◆ Pain during defecation
   - ◆ Fecal incontinence
4. Sleep and fatigue
   - ◆ Sleep quality
   - ◆ Waking episodes
   - ◆ General energy levels
5. Psychological screening
   - ◆ Anxiety
   - ◆ Mood swings
   - ◆ Baby blues
   - ◆ Postpartum depression

Tool: Edinburgh postnatal depression scale (EPDS)

III. Objective Assessment

Objective assessment evaluates physical, functional, and physiological impairments.

A. General Observation

Observe:

- ❑ Consciousness
- ❑ Orientation
- ❑ Body build
- ❑ Nutritional status
- ❑ Posture
- ❑ Gait

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- ❑ Facial expression
- ❑ Mobility

Postural assessment:

- ❑ Increased lumbar lordosis
- ❑ Rounded shoulders
- ❑ Forward head posture
- ❑ Thoracic kyphosis
- ❑ Pelvic tilt

B. Vital Signs

Assess:

- ❑ Pulse rate
- ❑ Blood pressure
- ❑ Respiratory rate
- ❑ Temperature
- ❑ SpO_2

Vital signs determine hemodynamic stability and readiness for exercise.

C. Pain Assessment

Use:

- ❑ Visual analog scale (VAS)
- ❑ Numeric pain rating scale (NPRS)

Assess pain at rest, movement, and during functional activities.

D. Edema Assessment

Observe for:

- ❑ Lower limb edema
- ❑ Hand swelling
- ❑ Facial puffiness

Grade edema if present.

E. Respiratory Assessment

Assess:

- ❑ Chest expansion
- ❑ Breathing pattern
- ❑ Accessory muscle use
- ❑ Cough effectiveness

Important especially after LSCS due to risk of reduced lung expansion and atelectasis.

F. Breast Assessment:

- ❑ Size
- ❑ Nipples
- ❑ Skin
- ❑ Stretch marks
- ❑ Rashes
- ❑ Cracked nipples
- ❑ Tenderness

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G. Abdominal Assessment

1. Inspection
   - Abdominal contour
   - Surgical scar
   - Skin changes
   - Striae
   - Umbilicus position
2. Scar Assessment
   - Site
   - Length
   - Healing
   - Tenderness
   - Adhesions
   - Infection signs
3. Diastasis Recti Assessment
   Measure inter-recti distance above, at, and below the umbilicus.
4. Abdominal Muscle Assessment
   Assess:
   - Strength
   - Activation pattern
   - Endurance

   Muscles:
   - Transversus abdominis
   - Rectus abdominis
   - Obliques

H. Pelvic Floor Assessment

(Perform only with consent and appropriate training.)

Assess:
- Leakage
- Pelvic heaviness
- Sexual dysfunction
- Pain

Pelvic Floor Muscle Examination:
- PAD Test
- Prevaginal Examination
- Perineometer

Modified Oxford Scale:

0 – No contraction
1 – Flicker
2 – Weak
3 – Moderate
4 – Good
5 – Strong

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I. Musculoskeletal Assessment

1. Range of motion (ROM)
   Assess cervical spine, lumbar spine, hips, and shoulders.
2. Muscle strength testing
   Assess core muscles, back extensors, hip muscles, and upper limbs using MMT.
3. Posture evaluation in various positions
4. Gait assessment
5. Functional assessment
   Evaluate:
   - Bed mobility
   - Sit to stand
   - Walking
   - Stair climbing
   - Baby lifting
   - Feeding posture

J. Neurological Assessment

If indicated assess:

- ❑ Sensory testing
- ❑ Reflexes
- ❑ Neural symptoms

Important after epidural anesthesia or nerve compression symptoms.

K. Circulatory Assessment

Assess:

- ❑ Varicose veins
- ❑ DVT signs
- ❑ Peripheral circulation

DVT warning signs:

- ❑ Calf pain
- ❑ Swelling
- ❑ Warmth
- ❑ Tenderness

L. Functional Outcome Measures

Recommended scales:

- ❑ Edinburgh Postnatal Depression Scale (EPDS)
- ❑ Pelvic Floor Distress Inventory
- ❑ Oswestry Disability Index
- ❑ Fatigue Severity Scale

IV. Follow-Up Plan

- ❑ Date:
- ❑ Progress:
- ❑ Modifications:

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V. Precautions and Red Flags

Refer immediately if:

- ❑ Excessive bleeding
- ❑ Fever
- ❑ Severe headache
- ❑ DVT signs
- ❑ Breathlessness
- ❑ Severe depression
- ❑ Wound infection
- ❑ Urinary retention

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Manual of Assessment in Community Physiotherapy

This manual offers a comprehensive and protocol-based approach to assessment in community physiotherapy, spanning women's health (antenatal and postnatal), geriatrics, industrial and occupational health, urinary incontinence, and obesity and fitness. Each chapter blends up-to-date scientific evidence with stepwise, ready-to-use assessment formats, including detailed subjective and objective proformas, special tests, outcome measures, and ICF-based thinking, making it directly applicable in busy clinical and community settings. With mixed experience of senior and emerging physiotherapy educators, the book has consciously incorporated practical and field-oriented assessment methods that reflect real-world challenges and decision-making in community physiotherapy practice.

Shrikant Sunil Sant BPT MPT (Community Physiotherapy) is a distinguished academician and clinician currently serving as a Professor in the Department of Community Physiotherapy at the MGM School of Physiotherapy, Chhatrapati Sambhajinagar. With over 12 years of experience in the field, he is a recognized Postgraduate Teacher, Evaluator, and Guide affiliated with institutions such as MGMIHS (Navi Mumbai), MUHS (Nashik), and PIMS-DU (Loni). Dr Sant holds a Master of Physiotherapy (MPT) in Community Physiotherapy from PIMS-DU and is currently a PhD Scholar at MGMIHS. His professional journey includes significant leadership roles, such as Institutional IQAC Coordinator, and he has a robust research profile with 20 publications, 7 paper presentations, and 9 copyrights. Notably, he was awarded the Linnaeus-Palme Faculty Exchange scholarship at the Karolinska Institutet in Stockholm, Sweden, in 2016.

This manual represents a collaborative effort by the faculty of the Department of Community Physiotherapy at MGM School of Physiotherapy. The contributing team includes Assistant Professors Dr Sonali Vispute BPT MPT (Community Physiotherapy), Dr Rudalee Husale BPT MPT (Community Physiotherapy), Dr Prachi Mhaske BPT MPT (Community Physiotherapy), Dr Aniruddha Thorat BPT MPT (Community Physiotherapy), Dr Kunal Nagwani BPT MPT (Community Physiotherapy), and Dr Kshipra Shastri BPT MPT (Community Physiotherapy). Each contributor brings specialized expertise to the text, covering essential assessment protocols for Women's Health, Geriatrics, Industrial Therapy, Urinary Incontinence, and Obesity and Fitness. Their collective goal is to provide a comprehensive and structured framework for physiotherapy evaluations, ensuring evidence-based care across diverse community populations.

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