



## SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES

**From**

Dr.Ambigai meena,  
Professor and HOD,  
Department of Obstetrics and Gynaecology,  
Sri Lakshmi Narayana Institute of Medical Sciences,  
Bharath Institute of Higher Education and Research,  
Chennai.

**Date:14.05.2020**

**To**

The Dean,  
Sri Lakshmi Narayana Institute Of Medical Sciences,  
Bharath Institute of Higher Education and Research,  
Chennai.

**Sub: Permission to conduct value-added course: Physiotherapy**

Dear Sir,

With reference to the subject mentioned above, the department proposes to conduct a value-added course titled: **Physiotherapy** on NOV 2020-JAN 2021. We solicit your kind permission for the same.

Kind Regards

Dr.Ambigai meena

---

### FOR THE USE OF DEANS OFFICE

Names of Committee members for evaluating the course:

The Dean : Dr. Rajasekaran

The HOD: Dr. Padma

The Expert: Dr. Nivethana aarthi

The committee has discussed about the course and is approved.

Dean

**Prof. S. RAJASEKARAN, M.S., (Gen.)**  
DEAN  
Sri Lakshmi Narayana Institute of Medical Sciences  
Osudu, Agaram Post, Pondicherry-605 502.

Subject Expert

ASSISTANT PROFESSOR  
DEPT. OF OBSTETRICS & GYNAECOLOGY  
Sri Lakshmi Narayana Institute of  
Medical Sciences  
OSUDU, PUDUCHERRY.

HOD

PROFESSOR & HEAD  
DEPT. OF OBSTETRICS & GYNAECOLOGY  
Sri Lakshmi Narayana Institute of  
Medical Sciences  
OSUDU, PUDUCHERRY.

# CONTENTS

- ❖ Introduction
- ❖ Maternal Physiology
- ❖ Antenatal care:
  - Objectives
  - Members
  - Role of physiotherapy
  - Women with special needs
- ❖ Post-natal care:
  - Role of physiotherapy
  - Physiotherapy and post-natal problems
- ❖ References

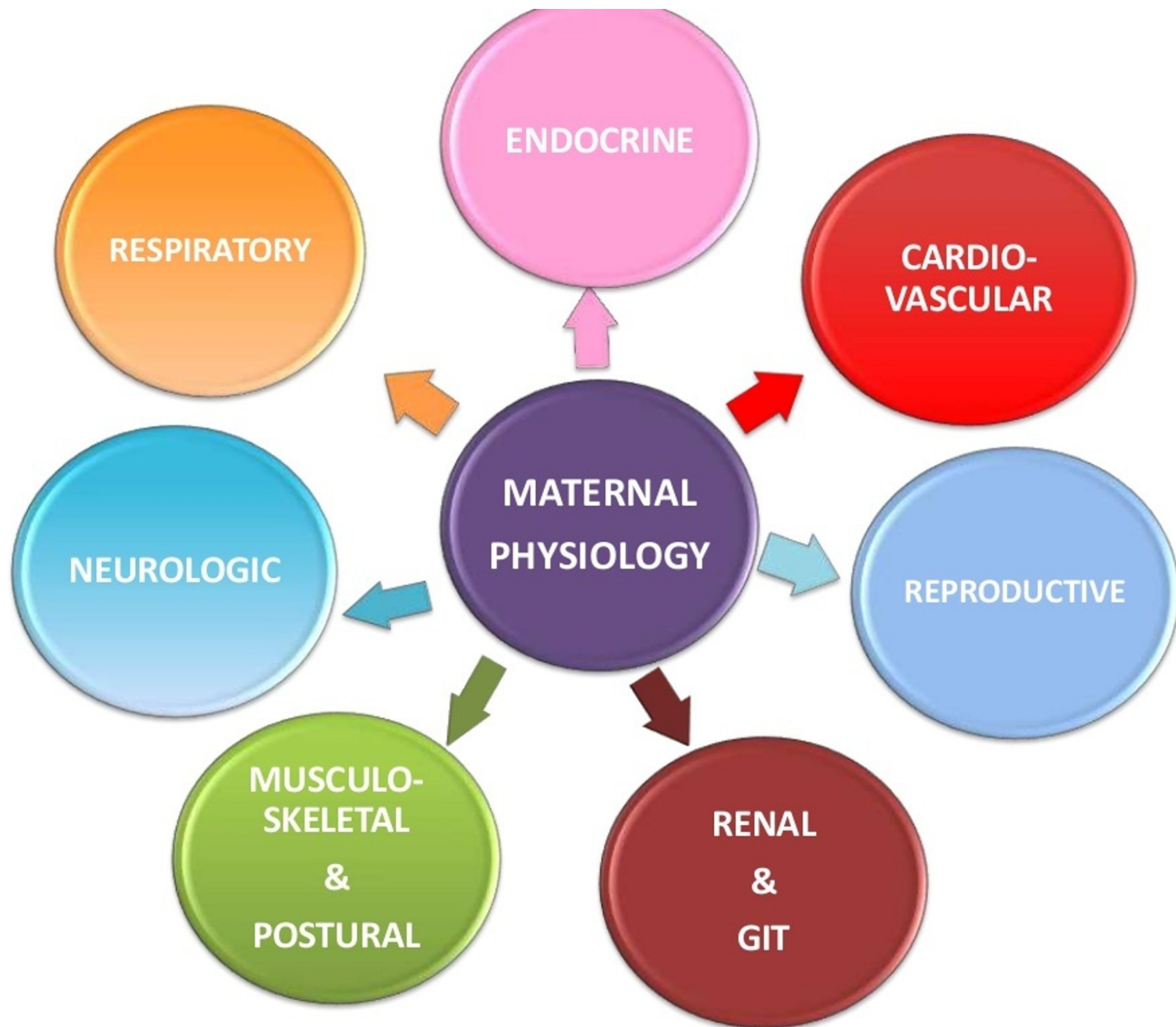




# INTRODUCTION

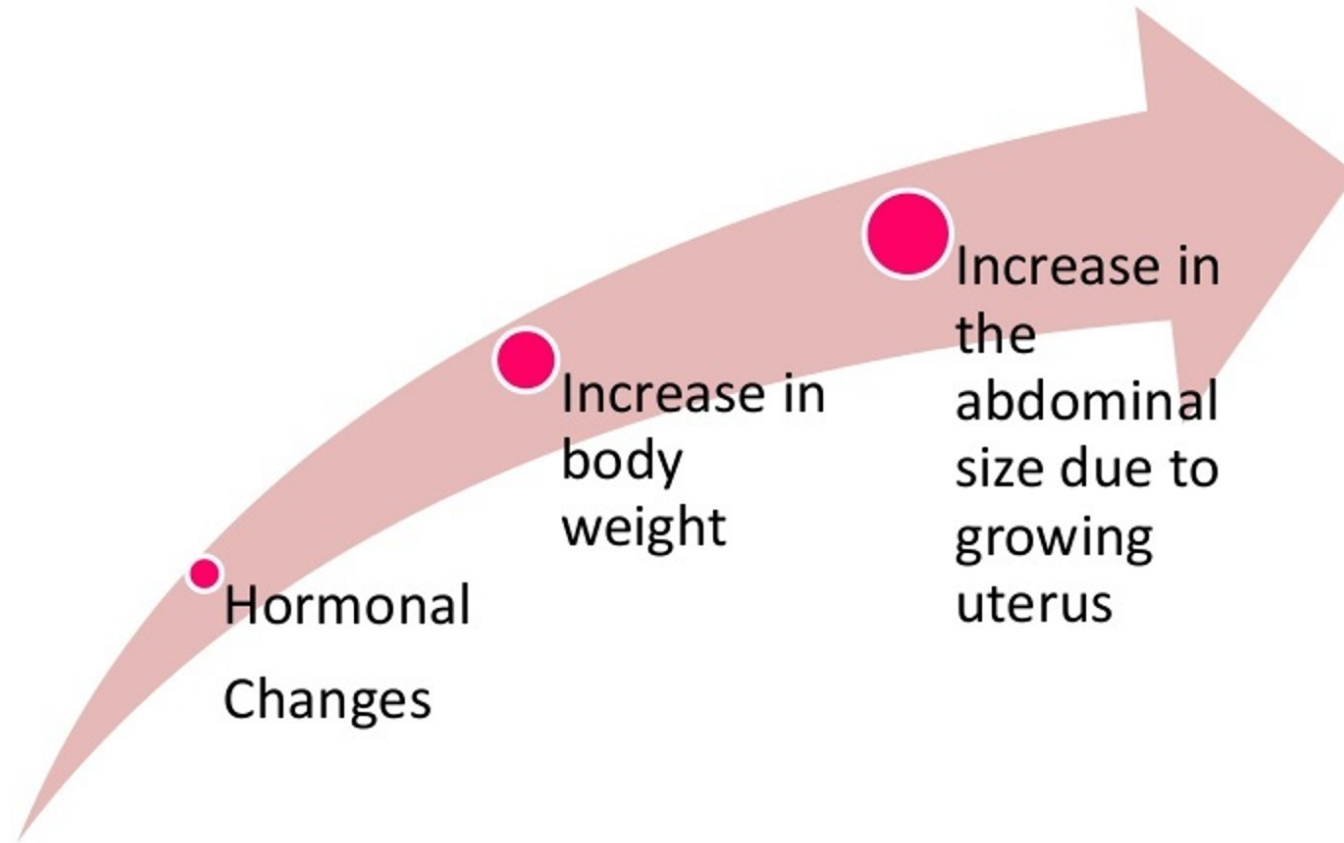
- Pregnancy is one of the most important period in the life of a woman, a family and a society. Therefore, great attention is given to antenatal care by the health care systems of most countries.

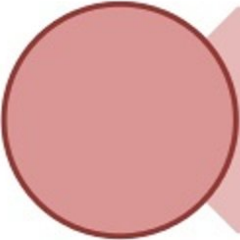




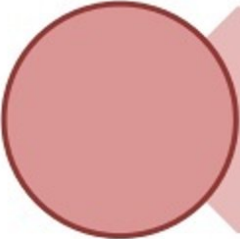


# MUSCULOSKELETAL CHANGES

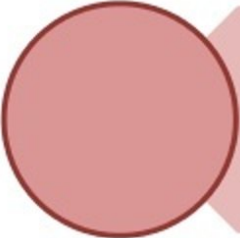




Increase in joint laxity & joint ranges



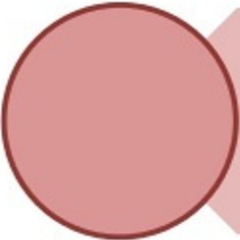
Increased water retention  $\Rightarrow$  oedema & nerve compressions



Drop in the pelvic floor  $\Rightarrow$  Pelvic floor dysfunction

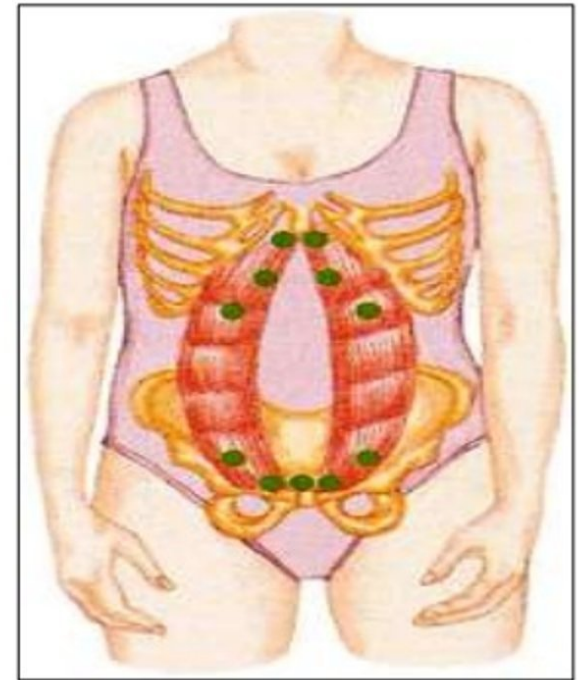


Painful muscle cramps

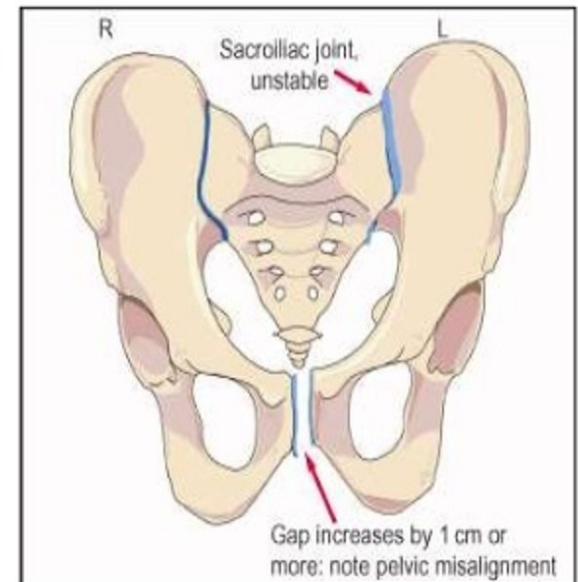


Pregnancy associated osteoporosis (PAO)

Diastesis Recti



Diastesis pubis

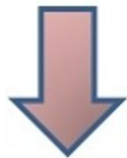


# POSTURAL CHANGES

Increase in the abdominal size



COG shifts anteriorly



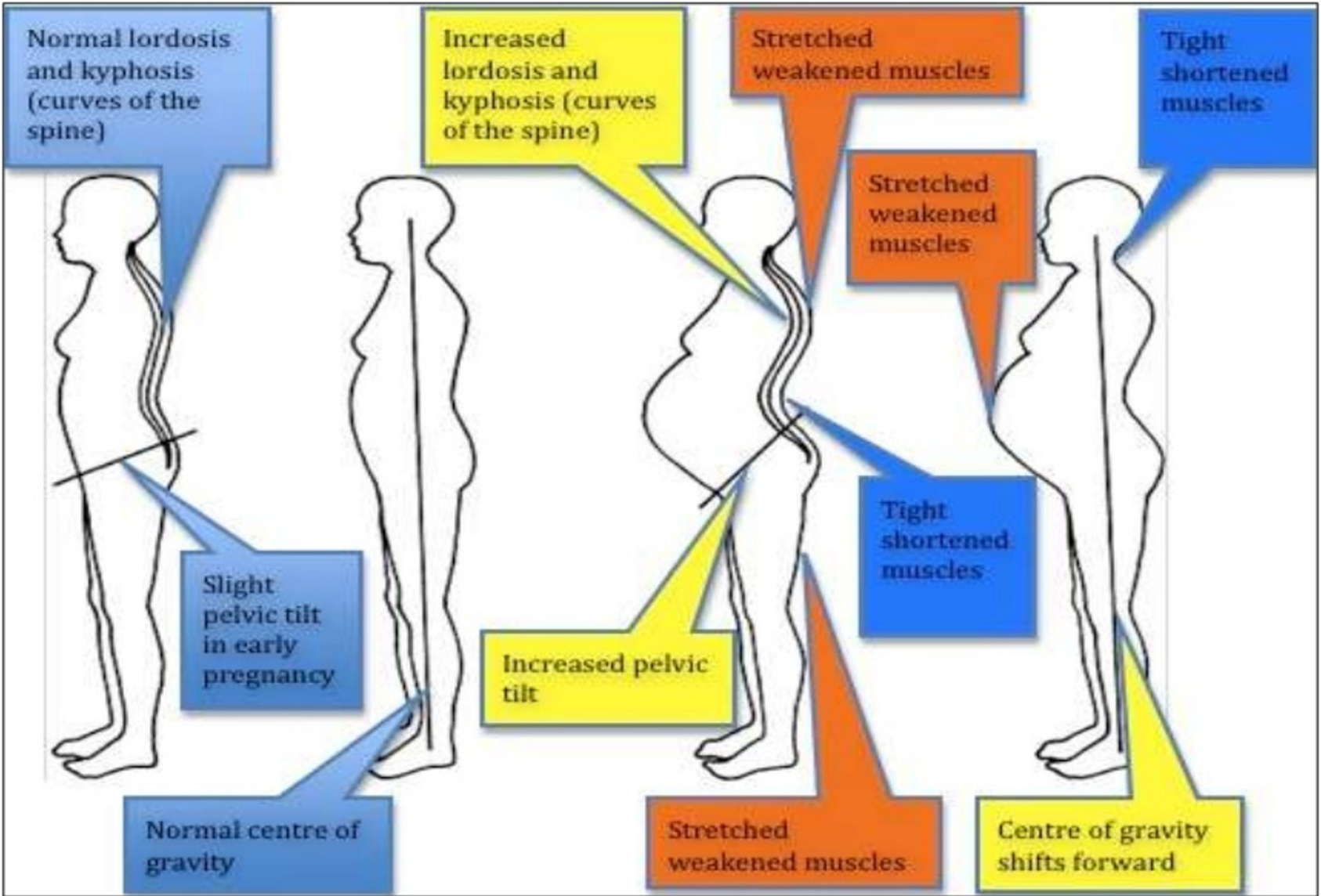
Counter-balanced by:



Protraction of the shoulders  
&  
Hyperextension of the knee

- \* Increase of lumbosacral angle
- \* Increase of lumbar lordosis and thoracic kyphosis
- \* Bending forward over the enlarging uterus





## INCORRECT UPRIGHT POSTURE

### HEAD

Chin pushing forward. Eyes focus down

### SHOULDERS AND CHEST

Slouching constricts the ribcage, makes breathing more difficult and causes indigestion

### ABS, BUTT & UTERUS

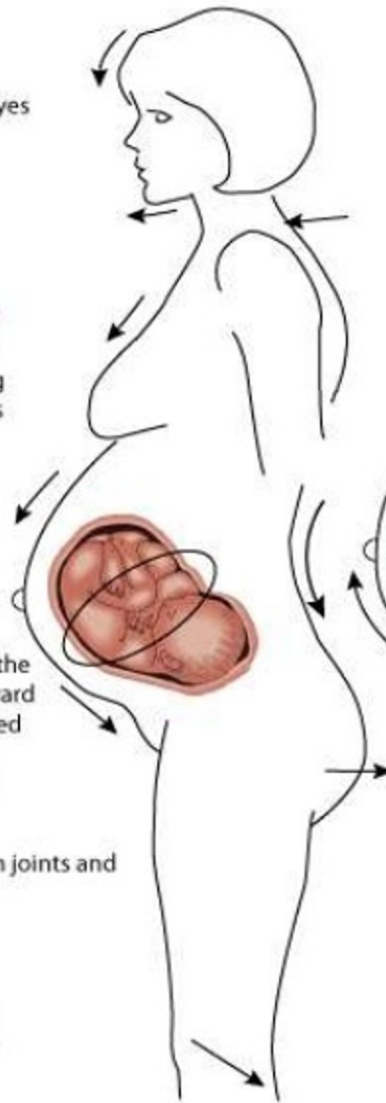
Slack muscles allow out the back and tilts pelvis forward causing backache, strained abdominals, and excess pressure on the bladder.

### KNEES

If pressed back you strain joints and push pelvis forward

### FEET

Weight on inner borders strains arches and calves causing leg aches.



## CORRECT UPRIGHT POSTURE

### HEAD

Lift through the crown of the head and keep chin lifted and ears in line with neck.

### SHOULDERS AND CHEST

Draw shoulders back and down while you lift the rib cage up.

### ABS, BUTT & UTERUS

Contract abdominals to support baby, tuck butt under and tilt pubic bone slightly forward to center pelvic bowl.

### KNEES

Bend knees to ease body weight over feet.

### FEET

Distribute body weight over center of each foot.



# GAIT

```
graph TD; GAIT[GAIT] --- WideBOS[Wide BOS]; GAIT --- LossOfBalance[Loss of Balance]; GAIT --- Waddling[Waddling];
```

Wide  
BOS

Loss of  
Balance

Waddling

## ANTENATAL CARE

- It is care of the woman during pregnancy
- Primary aim is to achieve at the end of the pregnancy, a healthy mother and a healthy baby
- Starts immediately from the time of conception



## HISTORY OF ANTENATAL CARE

- Prenatal care started in Edinburgh at the turn of the 20<sup>th</sup> century
- During the 1920s a few midwifery departments of hospitals and interested general practitioners saw women at intervals to check their urine for protein and some palpated abdomen.
- Most pregnant women had only a medical or midwifery consultation once before labour
- Doctors were concerned with antenatal care only “if any of the complications of pregnancy should be noticed”

- During the late 1920s a wider recognition emerged of the maternal problems of pregnancy as well as those of labour
- The medical profession and the then Ministry of Health woke up to realise that events of labour had their precursors in pregnancy

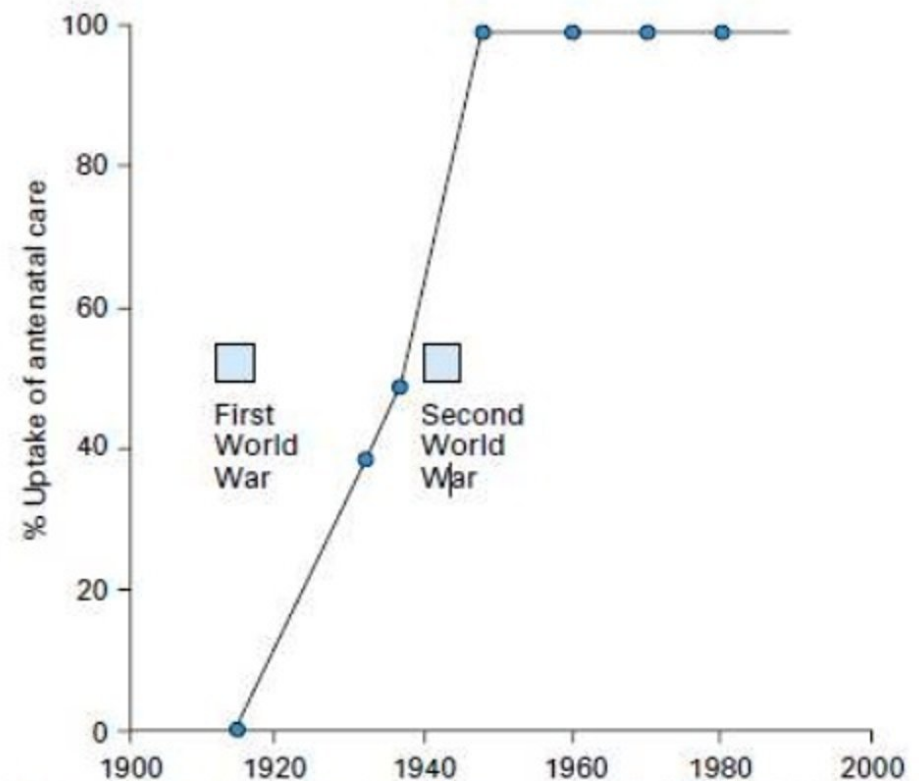


Figure 1.3 Uptake of antenatal care by women in England and Wales

- Janet Campbell, one of the most farsighted and clear thinking women in medicine, started a national system of antenatal clinics with a uniform pattern of visits and procedures



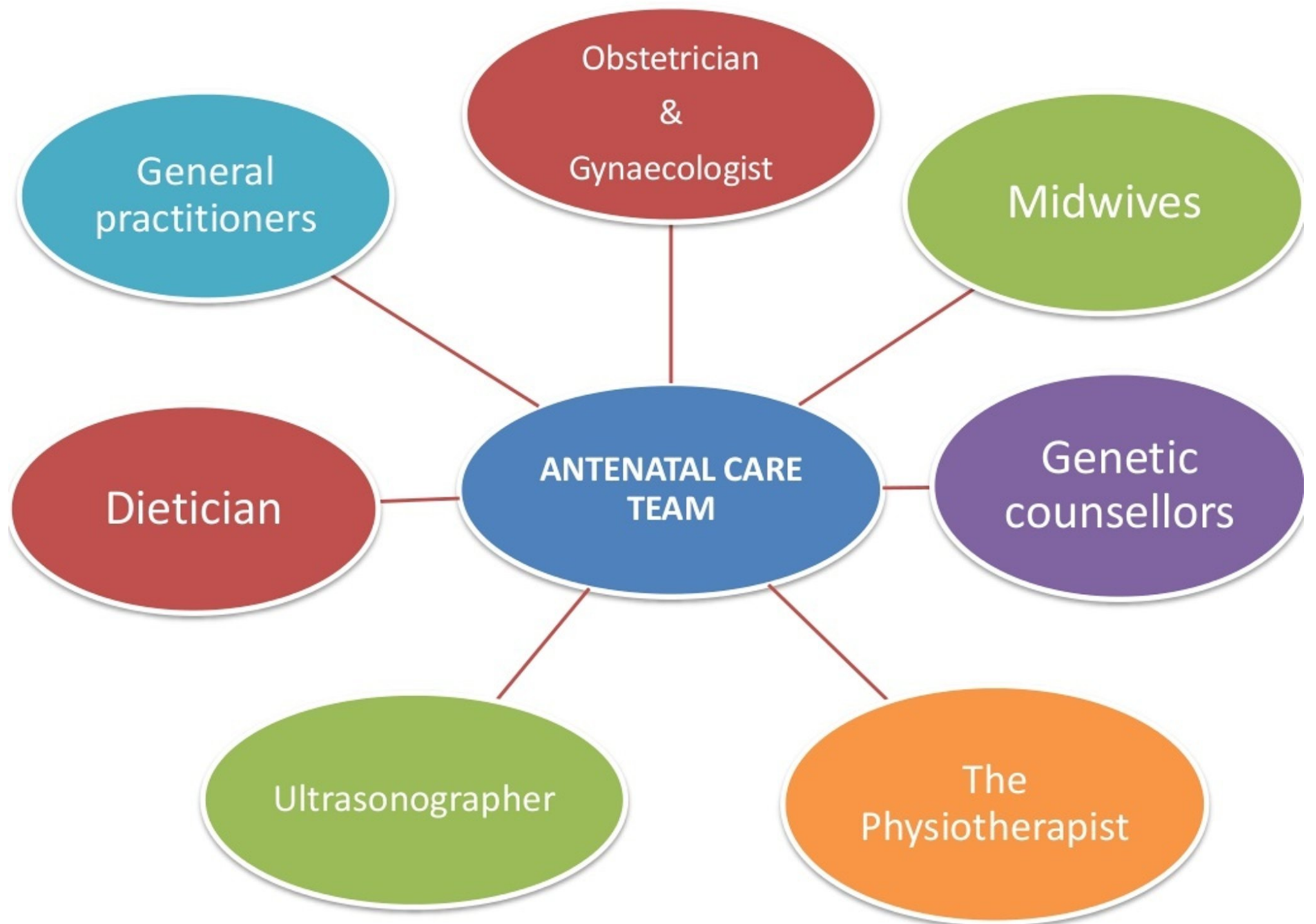
Dame Janet Campbell

- Based on her work in India in the 1930s, Vaughan instituted antenatal exercise classes in England. She wrote that “flexible hips and spine are conducive to ease of labor,” and women were encouraged to squat
- During the mid-1950s, “keep fit” exercises introduced by obstetric physiotherapist Helen Heardman in Britain were included with relaxation and breathing skills in Grantly Dick-Read's book on pain management for labor.



## Objectives

- Screening for foetal abnormalities
- Early identification of complications and their treatment
- Promote muscle tone, strength and endurance
- Enhance relaxation
- Prepare for post-natal program
- Providing education on nutrition, personal hygiene, birthing process



## ROLE OF PHYSIOTHERAPY IN ANTENATAL CARE

Prevention/Treatment of musculoskeletal problems

Promoting healthy lifestyles

Postural and Ergonomic advice

Preparing for labour

Teaching relaxation techniques

Optimal physical fitness

# Prevention/Treatment of musculoskeletal problems

## **1. Back and pelvic girdle pain**

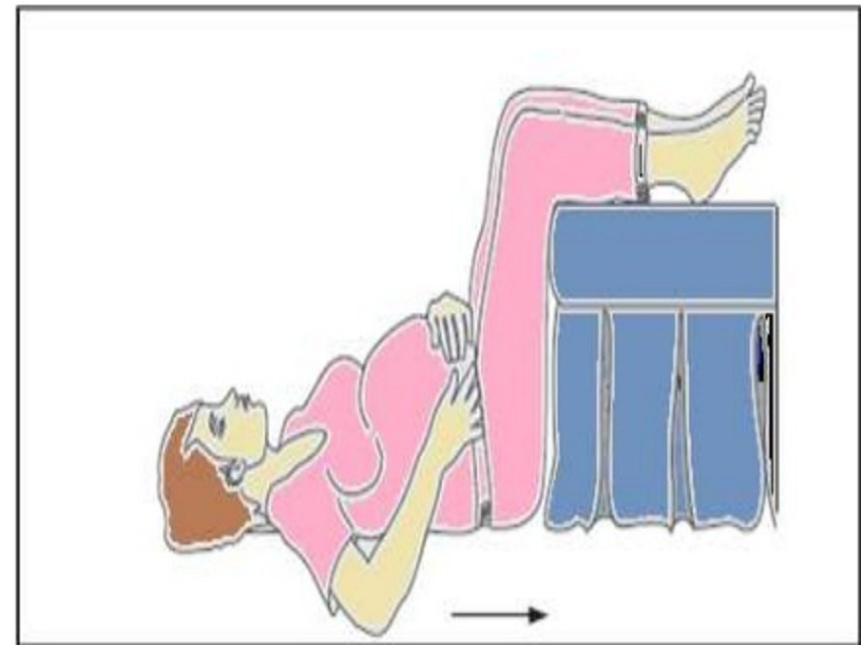
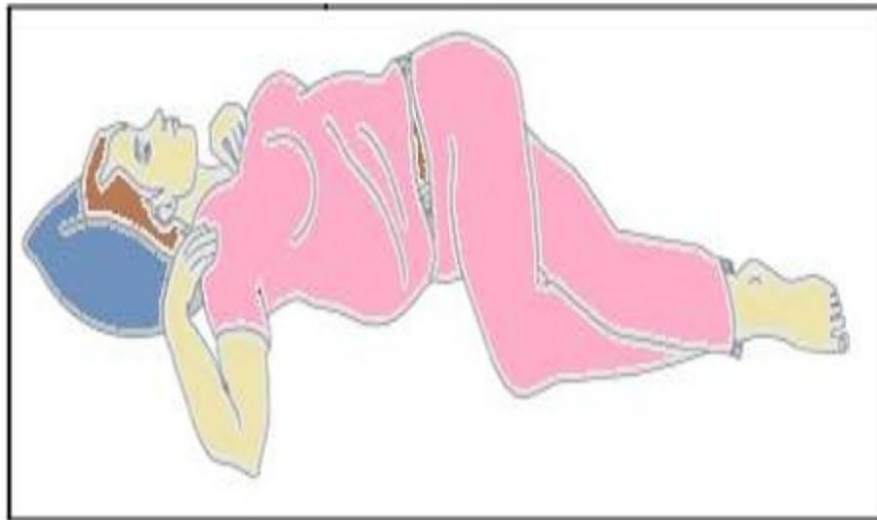
- Prevention
- Activities that reproduce the symptoms should be avoided
- Proper postural education
- For relief of pain:
  - Gentle massage,
  - Hot pack
  - TENS





## 2. Sacroiliac joint dysfunction

- Support belt
- Various self-help maneuvers can be taught to relieve sacroiliac joint pain



### 3. Symphysis pubis dysfunction

- Diastesis Pubis
- Rest and reduction of non essential chores
- Keeping the leg adducted
- Avoiding single-leg stance.
- Avoid long strides when walking, walking on uneven surfaces and excessive use of steps
- Gentle isometrics of hip adductors
- Pelvic support belts
- Ice pack

## 4. Coccydynia

- A cushion can be placed while sitting
- Gentle mobilisations
- Ice packs/heat, US and TENS



## 5. Pelvic floor dysfunction

- ❖ Stress incontinence
- ❖ Increased risk of pelvic organ prolapse
- Kegel's exercise
- Kegel balls or weights, vaginal cones, electronic kegel exerciser
- Electrical stimulation
- Electromyography can be used to train control
- Interferential therapy
- Bladder retraining programs

## 6. Nerve compression syndromes

### a. Carpal tunnel syndrome

- Ice packs
- Resting with the hands in elevation
- Ultrasound
- Splinting limiting wrist flexion

### b. Posterior tibial nerve compression

### c. Meralgia paraesthetica





## 7. Varicose veins

- Avoid standing or sitting for long periods, with the legs dependent
- Frequent and *vigorous* ankle dorsiflexion and plantar flexion may be performed
- Brisk walking
- Elevate feet when sitting or lying.
- Elastic stockings may be worn



## 8. Sciatica

- Reducing the activity levels; within pain-free range.
- Advice on positioning, back care and posture correction.

## 9. Muscle cramps

- Calf stretches
- Massage – deep kneading,
- Vigorous foot exercises
- A pre-bedtime brisk walk, vigorous foot exercises, and a warm bath may be prophylactic.

## 10. Chondromalacia patellae

- Ice packs 2-3 times per day,
- Strengthening of quadriceps

## 11. Restless Leg Syndrome

- Bed rest
- A period of reduced activity, e.g. giving up work may give some relief

## 12. Uterine ligament pain

- Warmth or cold, massaging or stroking, over the site of the pain

## Promoting healthy lifestyle

### ❖ Prenatal advice and education regarding :

- Diet

- Personal hygiene

- Use of drug



- Alcohol and Smoking

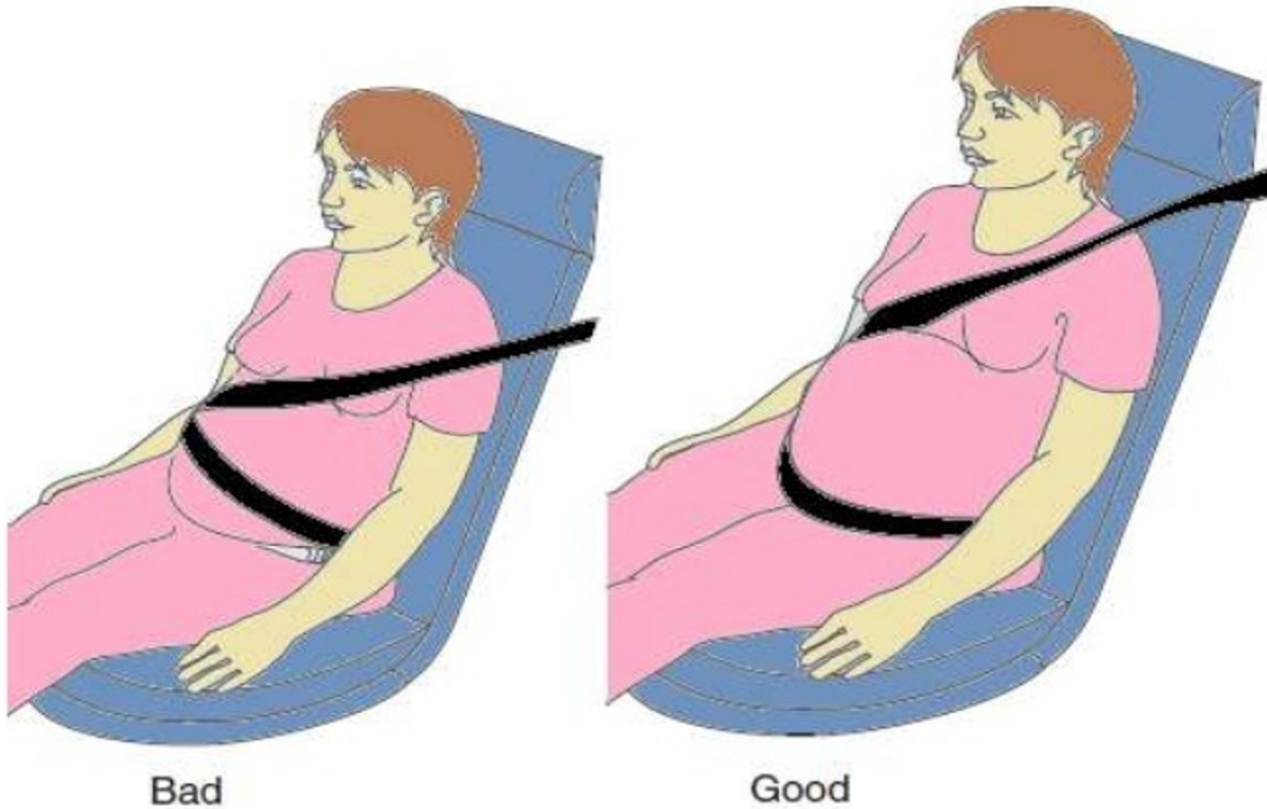


- Air travel- can fly safely up to 36 weeks

## Seat belt

- Above and below the bump, not over it
- Three-point seat belts should be worn throughout

(Why mothers die: a report on confidential enquiries into maternal deaths in the UK 1997-1999)





# Posture and Ergonomic advice

## 1. Lying:



Fig. 45.3 Half back-lying supported with pillows.



## 2. Rolling:

- Effective, safe and efficient (ESE) roll

### 3. Sitting:

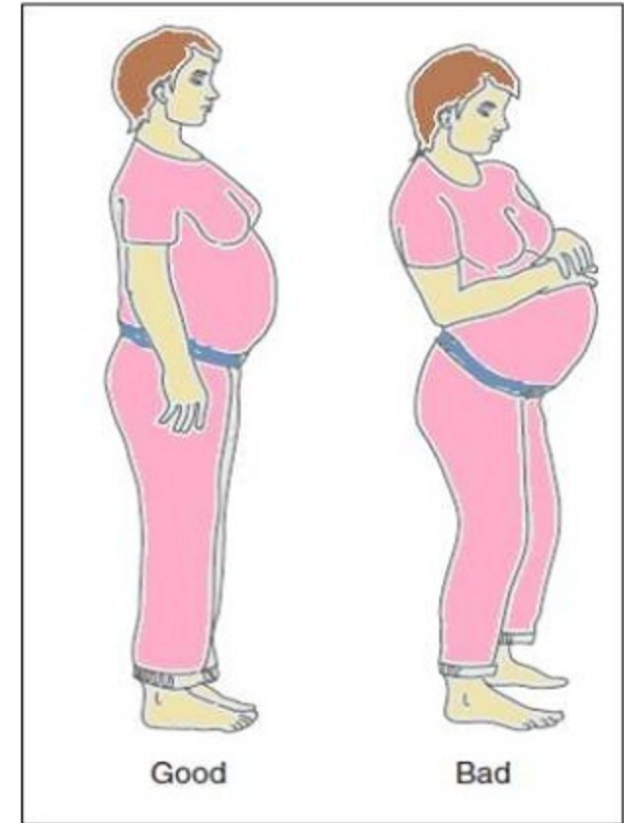


Bad Posture



Good Posture

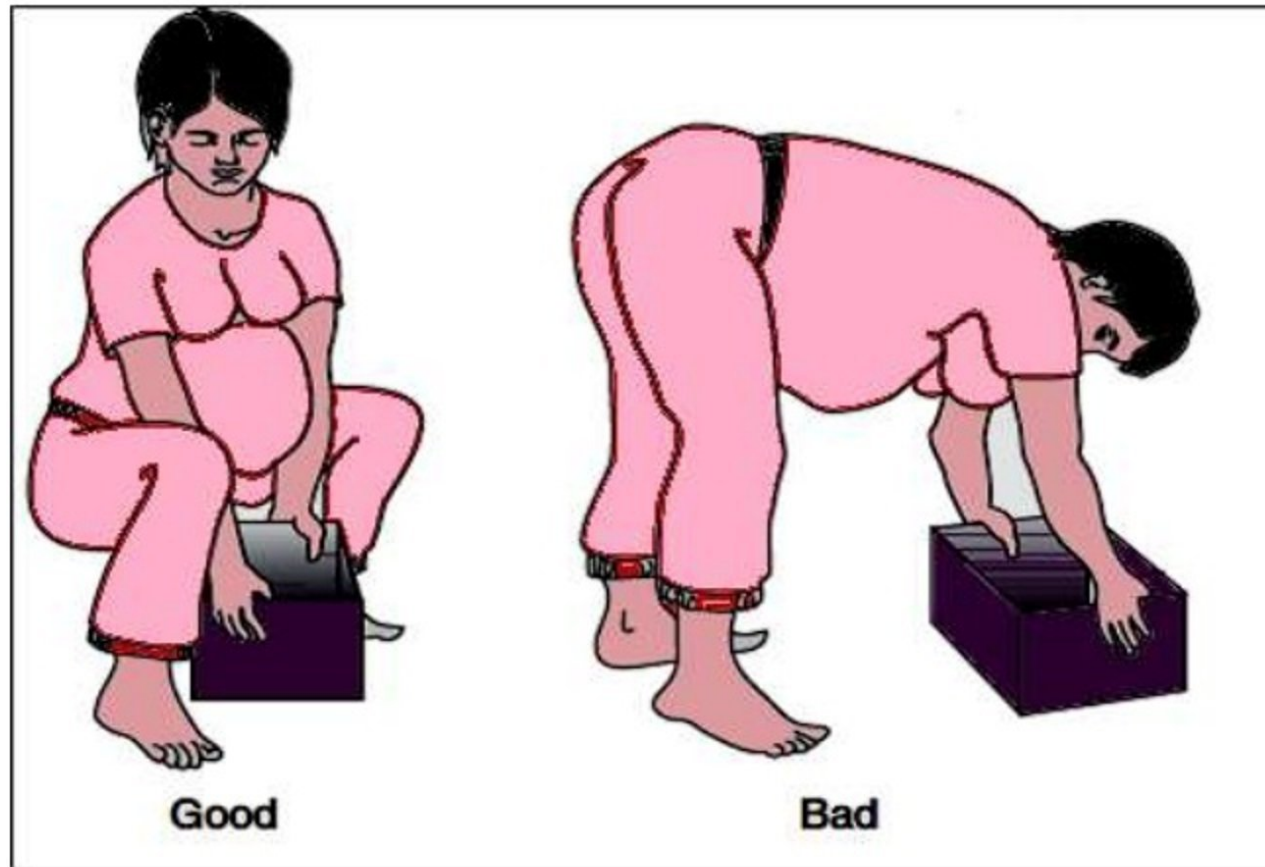
### 4. Standing and walking:



Good

Bad

## 5. Ergonomic education:



## Preparing for labour

- Birthing options that are available to the woman:  
water births, home based or hospital based delivery.





# Labor and Delivery

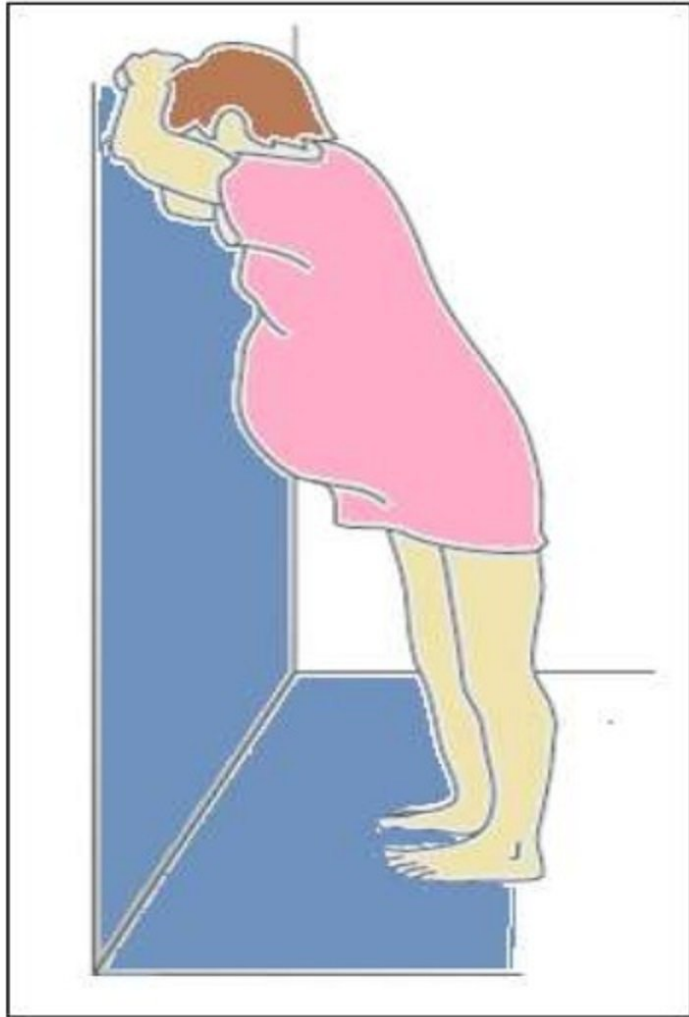
## Labor Positions



### 1<sup>ST</sup> STAGE:







- Stage 2



- Stage 3

# Pain relief in labour

## Pharmacologic

- Oral analgesics
- Inhalational agents eg. Nitrous oxide
- Parenteral analgesic eg. Pethidine
- Regional analgesia: epidural analgesia

## Non-Pharmacologic

- Relaxation and body awareness
- Breathing
- Massage
- Music
- TENS

## Relaxation techniques

### 1. The Mitchell Method

- Physiological relaxation
- Reciprocal relaxation of muscles

### 2. Contrast method/Jacobson's technique

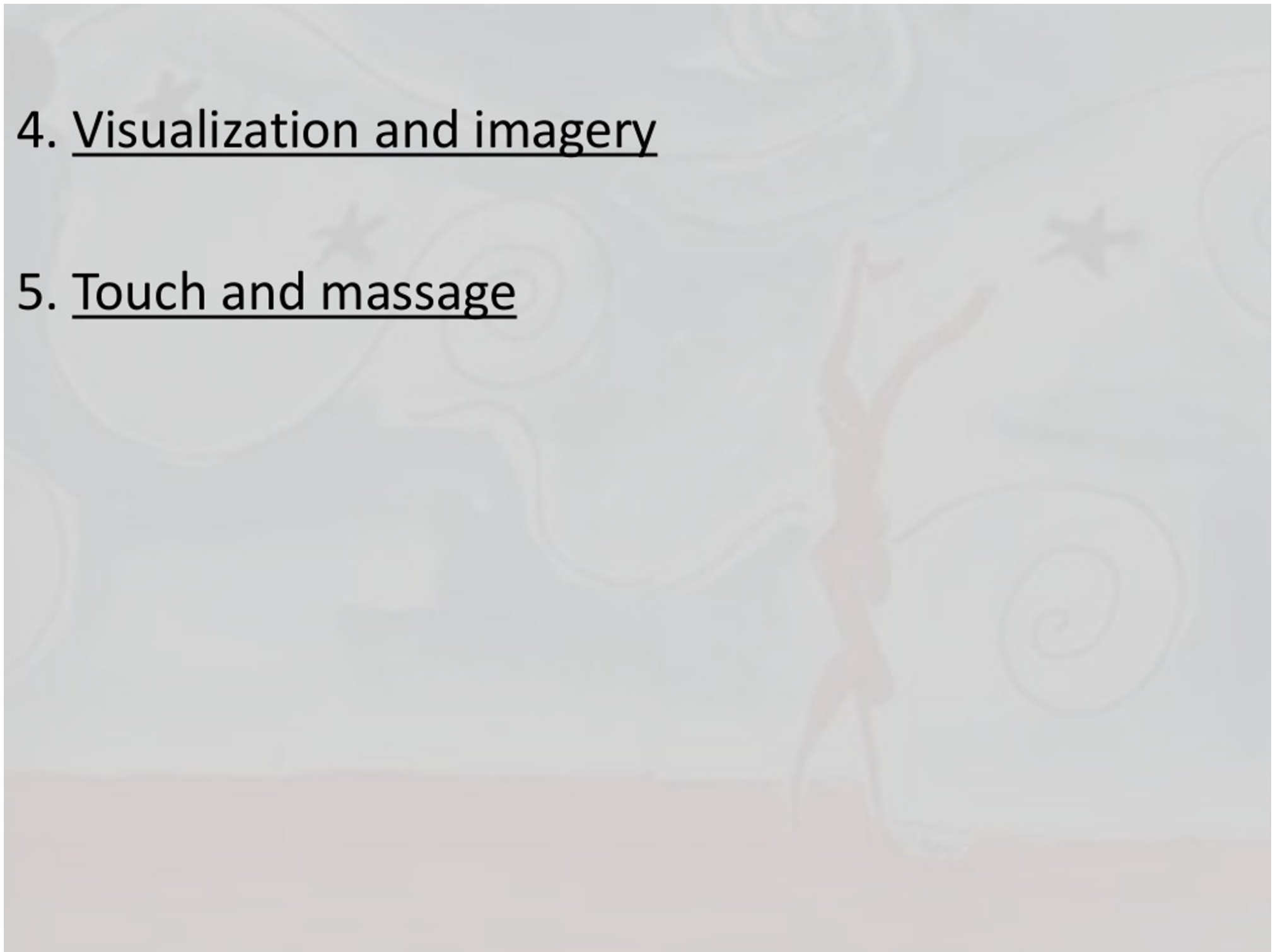
- Alternately contracting and relaxing muscle groups

### 3. Breathing exercises

- Pursed lip breathing, deep breathing exercises

4. Visualization and imagery

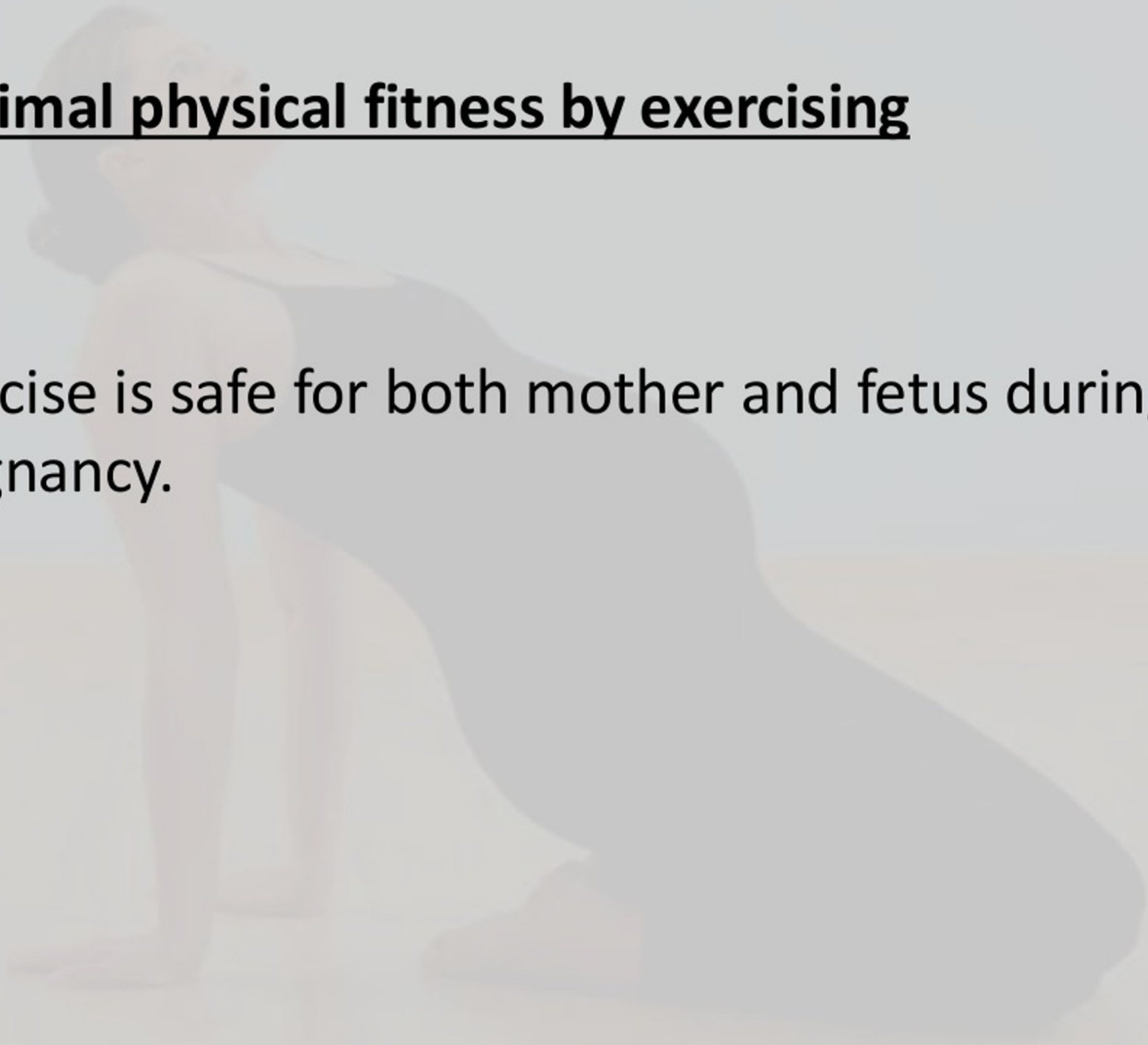
5. Touch and massage





## 6. Optimal physical fitness by exercising

- Exercise is safe for both mother and fetus during pregnancy.



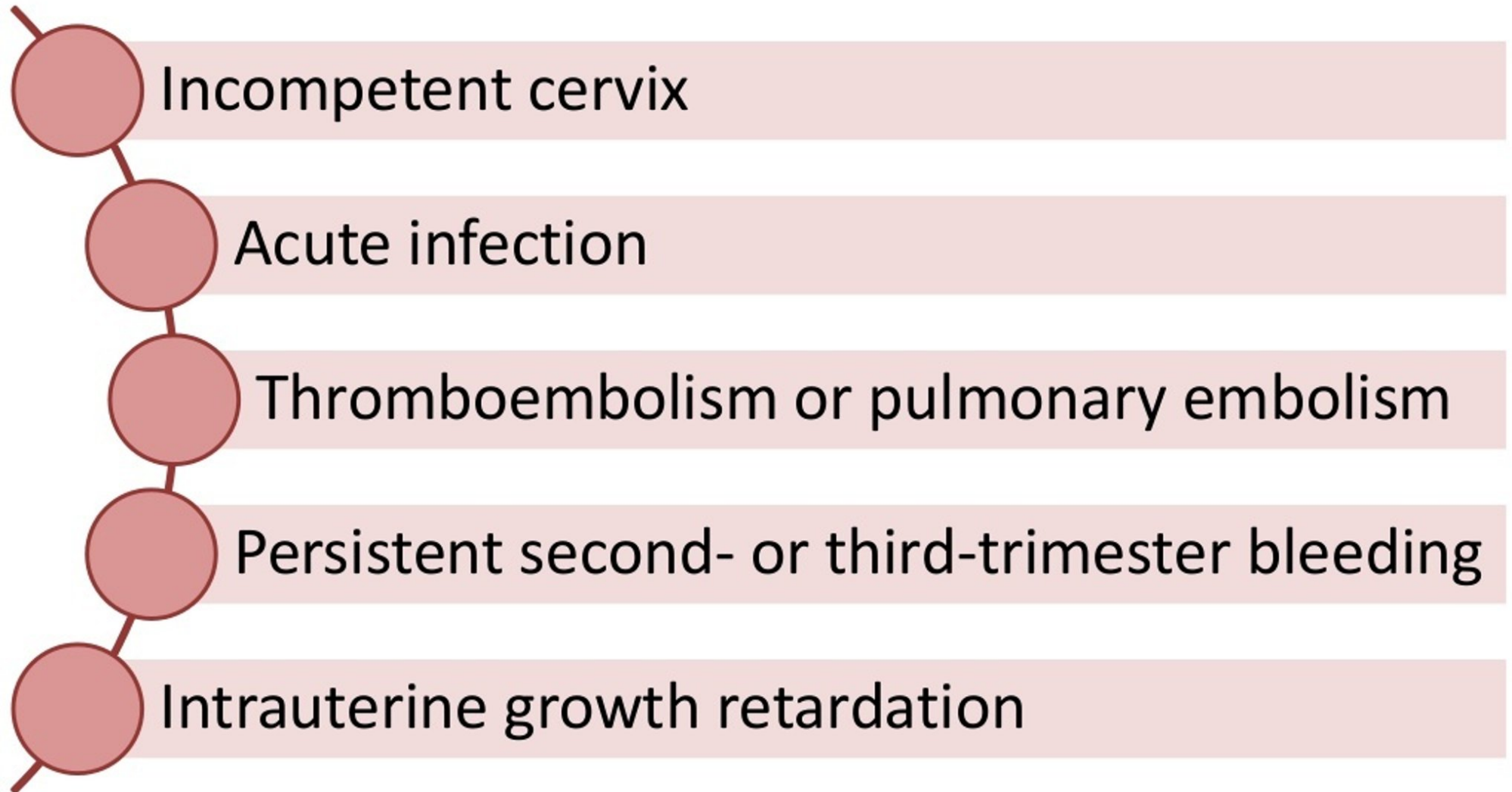
## Benefits of exercise in pregnancy

- Reduces common complaints of pregnancy such as fatigue, varicosities and swelling of extremities
- Reduces insomnia, stress, anxiety and depression.
- Weight-bearing exercises reduce the length of labour and prepares the woman for physical demands of labour
- Improves core stability and pelvic floor muscle strength

- Improves glycaemic control
- Protective effect on coronary heart disease, osteoporosis and hypertension
- Improves posture, strengthens muscles, and maintains muscle length and flexibility
- Decreased birth weight and less maternal weight gain
- Improves the feeling of wellbeing
- Helps in achieving the pre-pregnancy fitness levels

## Absolute Contraindications

- Haemo-dynamically significant heart disease like IHD, RHD, CHF
- Placenta praevia
- Preterm rupture of membranes
- Pregnancy-induced hypertension
- History of preterm labour





## Relative Contraindications



Chronic hypertension

Extreme morbid obesity

Poorly controlled seizure disorder

Mild to moderate cardiac disease

Severe anaemia

Twin pregnancy after 28<sup>th</sup> week

Exercise induced asthma

## Signs to terminate Physiotherapy Exercise

1. Excessive shortness of breath

2. Chest pain or palpitations

3. Painful uterine contraction

4. Presyncope or dizziness

5. Vaginal bleeding

6. Excessive fatigue

7. Abdominal pain

8. Reduced fetal movement

9. Leakage of amniotic fluid

# Exercise Risks During Pregnancy

## Maternal Risks

Musculo-skeletal trauma

Supine hypotension syndrome

Fall

Hypoglycaemia

## Foetal Risks

Foetal Distress

Preterm labour

Abnormal rise in the temperature

## Exercise Prescription in pregnancy

- Assessment of fitness status and individual goals

### Type of exercise

Aerobic exercises eg:  
walking, swimming

Resistive and  
flexibility exercises

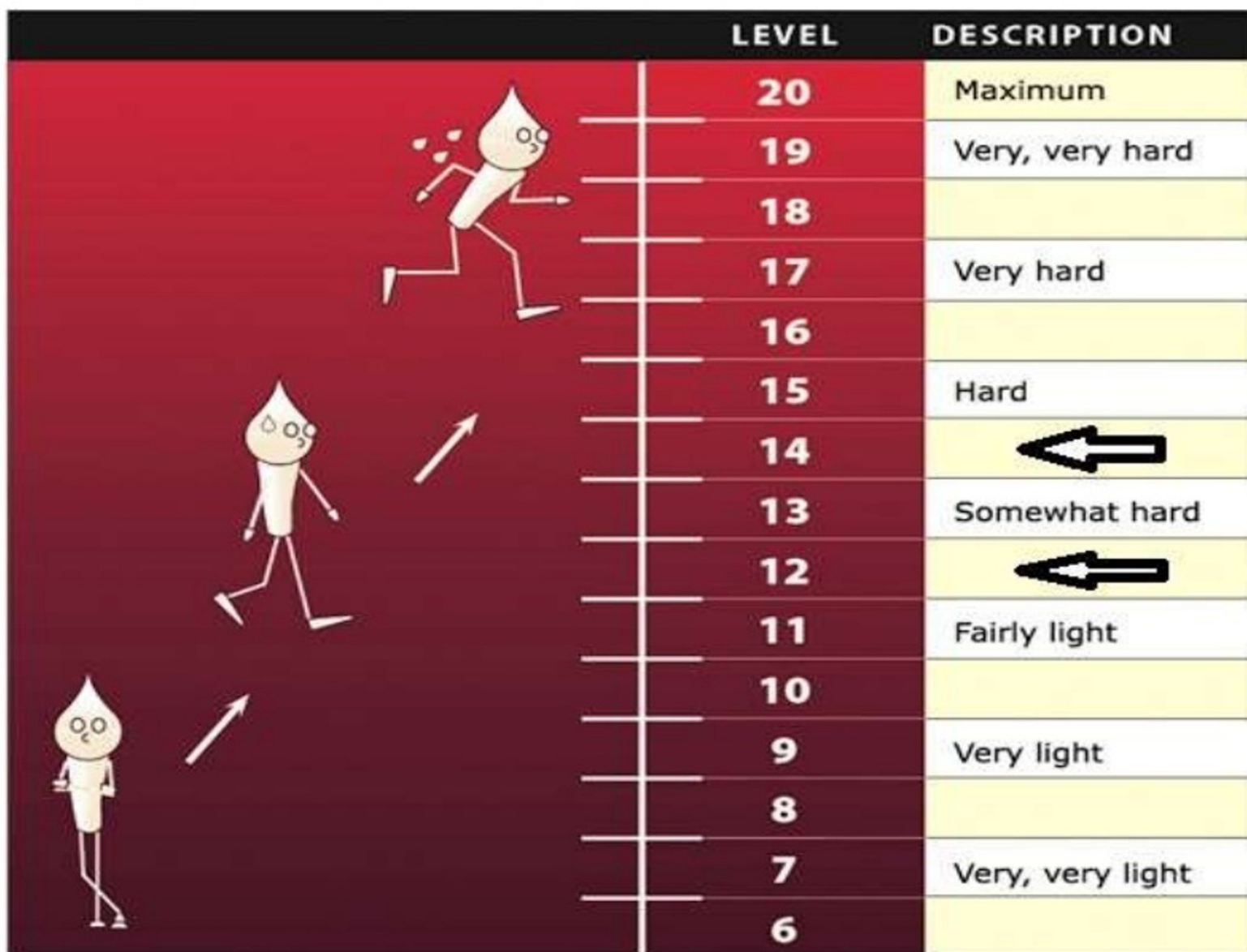
### Intensity

Maximal heart rate of  
60–70% for women who  
were sedentary

60–90% for women  
wishing to maintain  
fitness during pregnancy.

Borg scale of  
perceived exertion.







# Duration

Starting from 15 mins and progressing to 30 mins

Proper warm up and cool down periods of 5 – 10 mins each

# Frequency

Minimum of 3 times a week

Progressing to 4-5 times a week

## General Guidelines for Exercise in Pregnancy



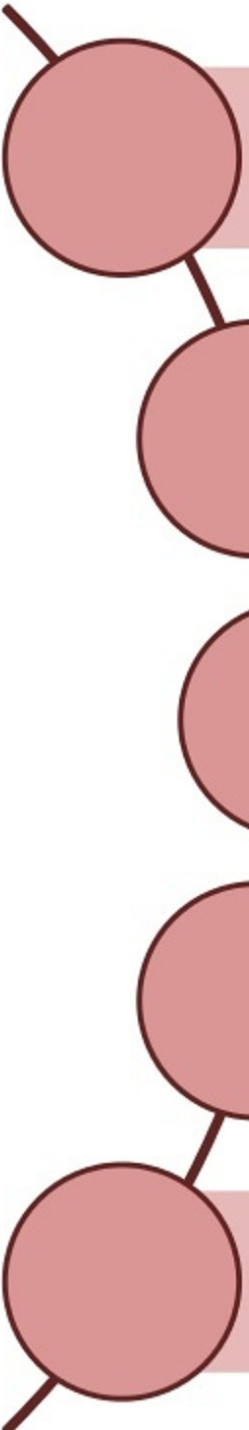
Physical examination is a must

Jerky, bouncing, ballistic movements/activities should be avoided

Warm up should precede ex. session followed by a cool down or gradual decline in activity

Maternal HR should not exceed 140 bpm

Do not overextend, overstretch joint or rapidly change directions



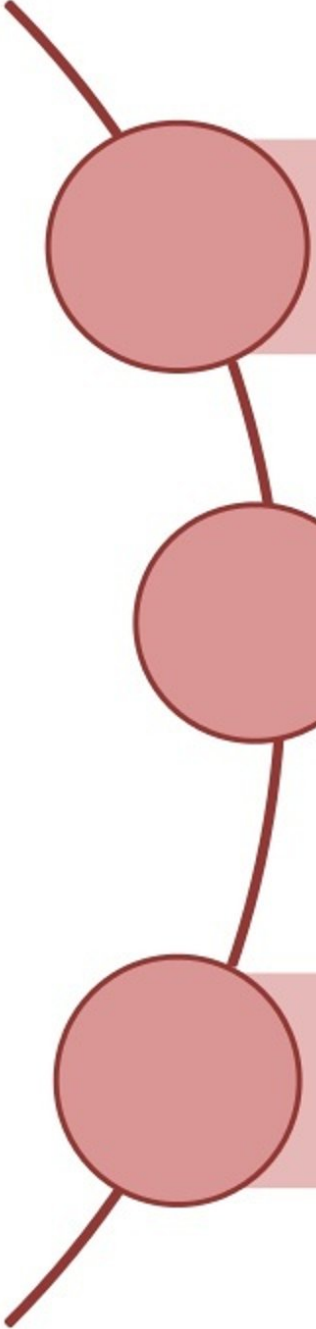
Avoid valsalva maneuver and avoid contact sports

No prone position after 1<sup>st</sup> trimester

Avoid exercises in supine after 4<sup>th</sup> month

**“No pain, no gain” does not apply**

Fluid must be taken before, during, & after exercise to avoid dehydration



Empty bladder before exercise and avoid GI discomfort by eating at least 1 hr prior to exercise

Strenuous exercise must be avoided in hot, humid weather or when pregnant woman is pyrexial

Horseback riding, gymnastics and cycling during pregnancy are not allowed



## Exercises according to the trimesters

Pregnancy is often divided into 'trimesters' each equating to approximately three months. The exercises permitted in each trimester differ.

- [Exercises in the 1st Trimester.docx](#)
- [Exercises in the 2nd Trimester.docx](#)
- [Exercises in the 3rd Trimester.docx](#)



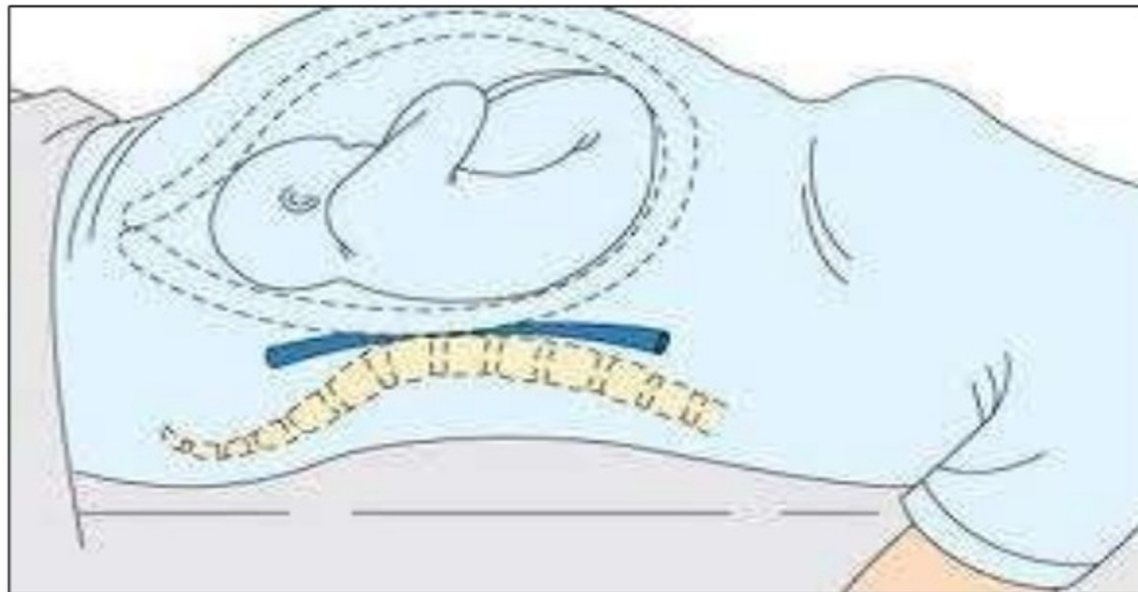
## Women with special needs

### **1. Gestational diabetes**

- Walking, stationary bicycling, low-impact aerobics, and swimming
- 5- to 10-minutes of warm-up and cool down period involving some flexibility exercises
- Precautions including monitoring blood glucose, scheduling rest periods and carefully tracking fetal activity and uterine contractions.

## 2. Pregnancy-induced hypertension (PIH) /pre-eclampsia and eclampsia

- Bed rest is advised
- Left side lying position so that there is no compromise of the venous return



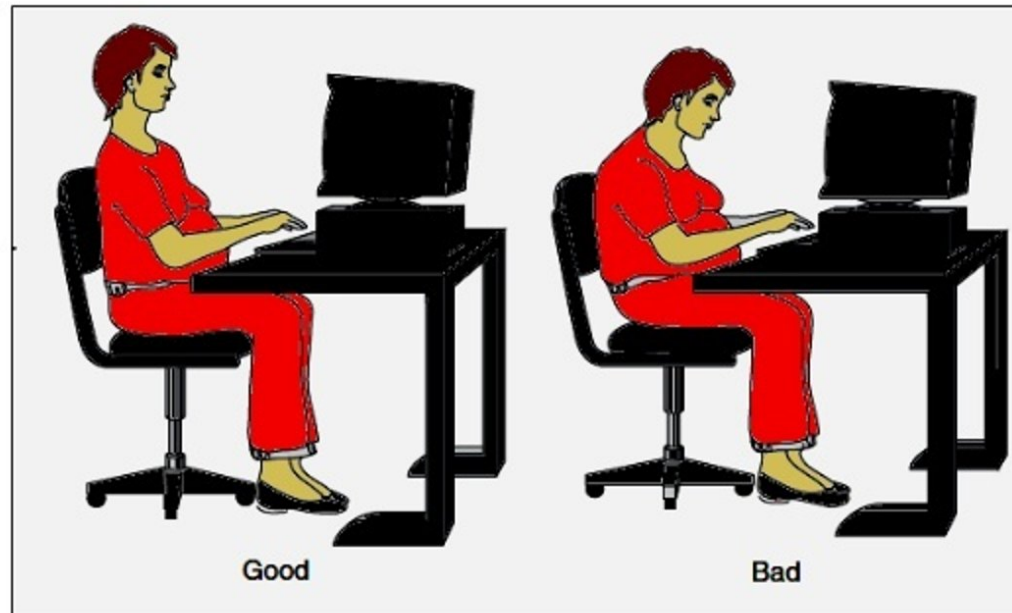
### 3. Competitive athletes

The major concerns are:

- The effects of pregnancy on competitive ability;
- The effects of strenuous training on pregnancy
  
- Constant supervision by an obstetric care provider
- Additional evaluation to assess fetal growth and wellbeing

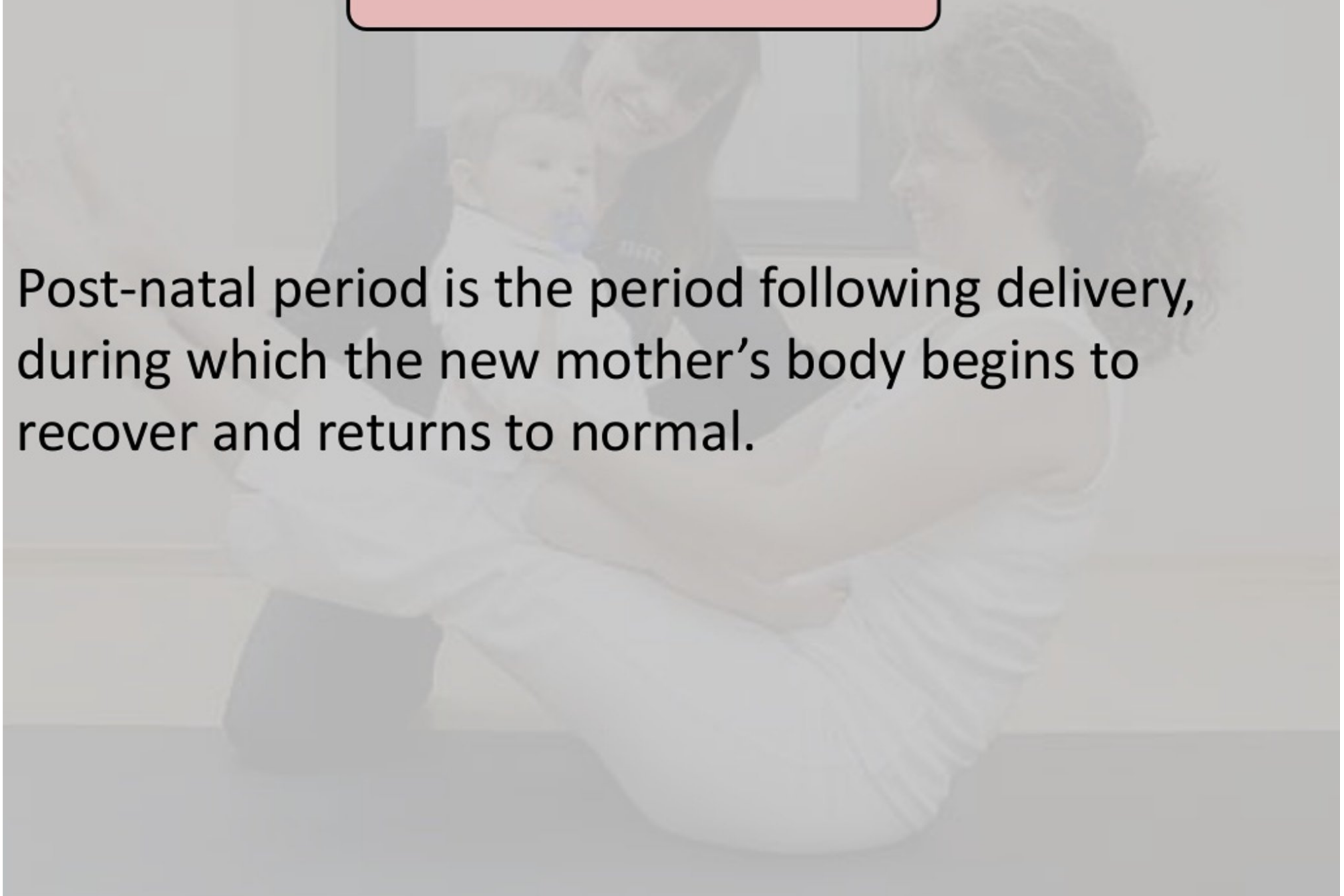
## 4. Women in the workplace

- Special consideration should be given
- Ergonomic analysis so as to reduce work-related stress, injuries, disease or discomfort.
- Control of the risk factors by making modifications in the task or the working technique.
- Ergonomic advice and postural correction



## POST-NATAL CARE

Post-natal period is the period following delivery, during which the new mother's body begins to recover and returns to normal.





## Role Of Physiotherapy In Post-natal Care

The main aims of physiotherapy during this period are:

- Introducing an exercise and relaxation program, thereby assisting the new mother's in physical recovery
- Restoration of the muscle strength and tone
- Treatment of musculoskeletal problems
- Teaching correct ergonomics for breast-feeding, handling the baby and house-hold chores

- Using this opportunity to educate the mother regarding the various family planning methods and its importance.
- Providing support and counselling and helping to cope with the stress
- Education regarding importance of post-natal exercises and breastfeeding

# Physiotherapy following a normal vaginal delivery

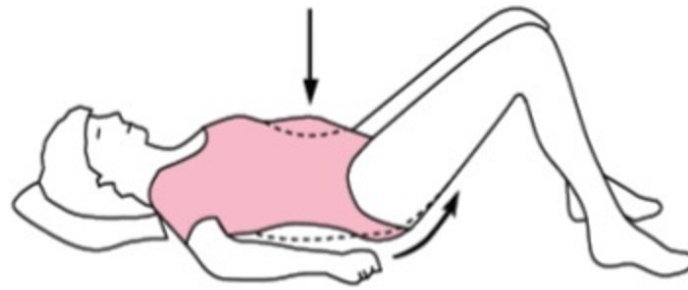
## Exercise program

- Active movements of the limbs eg: ATMs and Heel slides

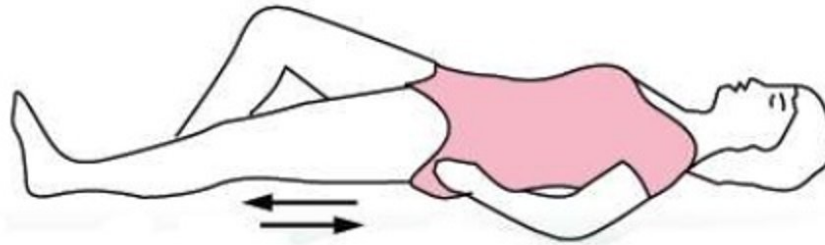


- Deep breathing exercises
- Pelvic floor exercises

- Pelvic tilts



- Gluteal sets



- Single knee to chest



- Cat-camel exercise

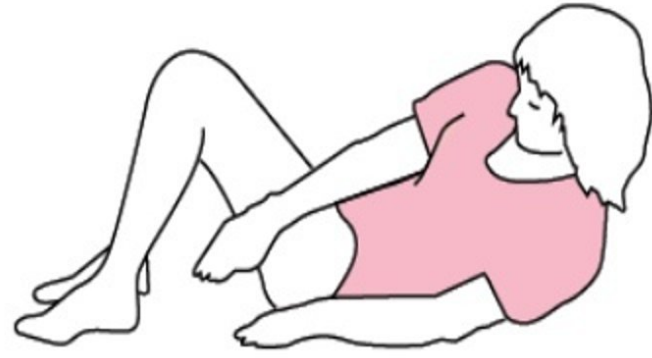
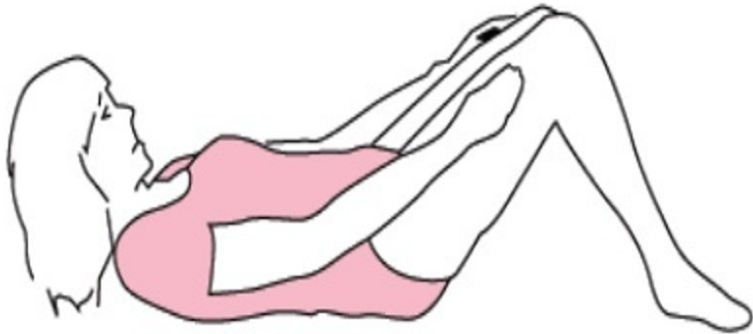


- Single straight leg raise





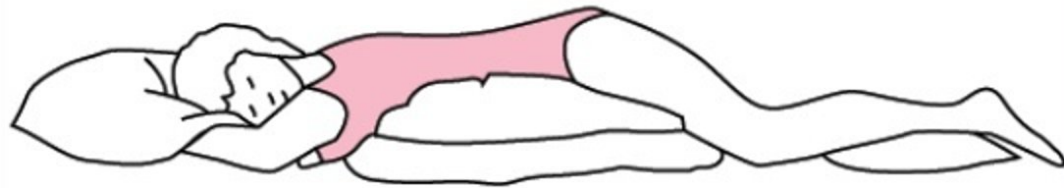
- Abdominal curl-ups: straight curl ups and diagonal curl ups



- Bridging

## Teaching Posture and Ergonomic principles

- Correct posture in standing, sitting, lying and kneeling should be taught



- Special emphasis on:  
feeding,  
nappy changing,  
baby bathing,  
carrying/lifting



- various feeding positions of comfort



DON'T

DO





Appropriate use of carrying slings to avoid back problems.



Pram handles at the correct height to avoid back problems.

**DON'T**



**DO**



## Physiotherapy following a cesarean delivery

- TENS for pain
- Diaphragmatic breathing and segmental expansion exercises
- Splinted coughing
- Knee rolling





- Movements of the limbs
- Pelvic floor exercises
- Pelvic tilts
- Bridging exercises



- Posture correction
- Ambulation should be initiated as early as possible
- Core stability exercises
- Vigorous exercises should be done after 6-8 weeks

# Post-natal Problems and Physiotherapy

## MUSCULOSKELETAL PROBLEMS

### 1. Perineal pain

- Rest and apply ice for 10 to 15 mins, every 2-4 hours
- Pelvic floor exercises using contract-relax technique improves circulation and reduces swelling
- Use of cushion when sitting
- Electrotherapy: ultrasound, Pulsed electromagnetic energy (PEME), low level laser therapy, infrared or surface heat

## 2. Diastasis of recti abdomini muscles (DRAM)

- A gap between the recti abdomini muscles of greater than 25 mm, palpated just superior to the umbilicus



The corrective exercises include:

- Isometric abdominal exercise
  - Head lifts
  - Head lifts with pelvic tilts
  - Leg sliding with pelvic tilts
  - Pelvic tilts in quadruped position
- 
- If the diastasis is large, its recommended to use a temporary abdominal support like abdominal binder



### 3. Back pain

- Strengthening of the weak muscles by low load, endurance exercises.
- Mobilization for the sacro-iliac, lumbar or lumbo-acral regions in case of low back pain
- Teaching to maintain correct postures and correct ergonomics
- Hot pack

### 4. Thoracic pain

- Postural correction
- Gentle exercises
- Hot or ice packs

## 5. Symphysis pubis

In addition to treatments used antenatally, other methods that can be used are:

- Trochanter belts or a full pelvic binder
- Drawing the abdomen in is encouraged before moving around the bed.
- TENS, US
- Orthopaedic aids

## 6. After pains

- TENS over T10-L1 and S2-S4 that innervates the uterus and perineum may relieve pain
- Exercises

## 7. Abdominal induration

- Moist pack or SWD can be given to resolve the intramuscular haematoma

## CIRCULATORY PROBLEMS

### 9. Varicose veins

- Vigorous and frequent, dorsiflexion and plantarflexion
- Pressure stockings
- Sitting or lying with the legs raised

### 10. Oedema

- Vigorous ankle-toe movements
- Resting with legs elevated
- Pressure stockings

## 11. Deep vein thrombosis

If the DVT is in calf:

- Vigorous ankle-toe movements and legs elevated
- Avoid pressure on the back of the calf while carrying out any activities

If the DVT is in iliofemoral region:

- Bed rest may be advised till the swelling subsides
- Legs in elevation
- Foot exercises, quadriceps and gluteal muscle contractions, hip and knee flexion and extension can aid in circulation.



# BLADDER AND BOWEL PROBLEMS

## 12. Stress incontinence

- Kegels exercise
- Kegel balls or weights, vaginal cones, electronic kegel exerciser can be used to strengthen the pelvic floor muscles.
- Electrical stimulation and interferential therapy
- Electromyography can be used to train control
- Bladder Retraining

## 13. Bowel incontinence

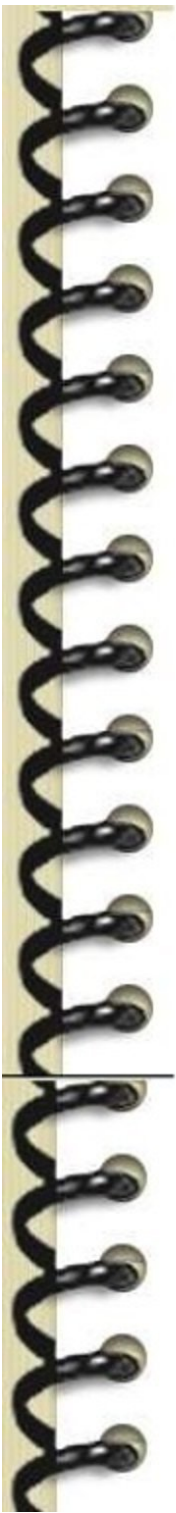
## 14. Constipation

## PSYCHOLOGICAL PROBLEMS

15. The three common manifestations of Post-natal depressive illness are:

- The 'maternity', 'baby', 'third day' blues
- Puerperal psychosis
- Postnatal depression

16. Breast engorgement, mastitis, tender and cracked nipples



Summary

## References

1. Mantle J, Haslam J, Barton S. Physiotherapy in obstetrics and gynaecology. 2<sup>nd</sup> ed. Edinburgh: Butterworth-Heinemann, Elsevier; 2005
2. Sapsford R, Bullock J, Markwell S. Women's Health: A textbook for Physiotherapist. 13<sup>th</sup> ed. WB Saunders;1998
3. Stephenson R, J. Linda. Obstetric and Gynaecologic care in Physical Therapy. 2<sup>nd</sup> ed. USA: SLACK incorporated; 2000
4. Park K. Textbook of Preventive and Social Medicine. 20<sup>th</sup> ed. Jabalpur: M/s Banarsidas Bhanot;2009

5. Desai P, Malhotra N, Shah D. Principles and practice of Obstetrics & Gynaecology for postgraduates. 3<sup>rd</sup> ed. JAYPEE Brothers;2008
6. Dutta DC. Textbook of Obstetric including Perinatology and contraception. 6<sup>th</sup> ed. Calcutta: Central book agency; 2004
7. Sports Medicine Australia. *SMA statement: the benefits and risks of exercise during pregnancy. J Sci Med Sport* 2002; 5:11–19
8. ACOG Committee. Opinion no. 267: exercise during pregnancy and the postpartum period. *Obstet Gynecol* 2002; 99: 171–3



9. Royal college of obstetrics and gynaecology. statement no 4. 2006. Available from:  
[http://www.rcog.org.uk/womens-health/clinical\\_guidance/exercise-pregnancy](http://www.rcog.org.uk/womens-health/clinical_guidance/exercise-pregnancy)
10. George D. Harris, Russell D. White. Diabetes management and exercise in pregnant patients with diabetes. CLINICAL DIABETES.2005;23( 4):165-168
11. Carriere B. Fitness for the Pelvic Floor. Thieme; April 15, 2002
12. Chamberlain G, Morgan M. ABC of antenatal care. 4<sup>th</sup> ed. London: BMJ Books; 2002



THANK YOU

# Bharath institute of Higher Education and Research

## Sri Lakshmi Narayana Institute of Medical Sciences

Participant list of Value added course: **Physiotherapy**

NOVEMBER 2020 - JANUARY 2021

SL.NO	REG. NO	STUDENTS NAME	SIGNATURE
1	U12MB221	BHARATHI K.	<i>Bharathy</i>
2	U12MB222	CHENNUPATI LAKSHMI SHRAYA	<i>Lakshmi</i>
3	U12MB223	CINDRELLA ESTHER.J	<i>Esther</i>
4	U12MB224	DEVIKA S.	<i>Devika</i>
5	U12MB225	DHIVAKER.N	<i>Dhivaker</i>
6	U12MB226	DIVYA V.B.	<i>Divya</i>
7	U12MB227	GAYATHRI G.	<i>Gayathri</i>
8	U12MB228	GOKULRAJ.M	<i>Gokulraj</i>
9	U12MB229	GOKULNATH.E	<i>Gokulnath</i>
10	U12MB230	GOSULA PRIYANKA	<i>Priyanka</i>
11	U12MB231	GYNANA SURIYA PRAKASH .K	<i>Suriya</i>
12	U12MB232	HARI PRASANTH.M	<i>Prasanth</i>
13	U12MB233	ISWARYA R.	<i>Iswarya</i>
14	U12MB234	JANANI .S	<i>Janani</i>
15	U12MB235	JENNATHUL THURIYA .S	<i>Jennathul</i>
16	U12MB236	JOSELINE PRINCY A.	<i>Josefine</i>
17	U12MB237	KALAIARASAN.J	<i>Kalaiarasan</i>
18	U12MB238	KANNIKA .T	<i>Kannika</i>
19	U12MB239	KARTHIKEYAN .N	<i>Karthikeyan</i>
20	U12MB240	KAVI NILAVU.K	<i>Kavilav</i>

## Assessment of course on Physiotherapy in OBG

**1. Who started a nutritional system of antenatal clinic with a uniform pattern of visit and procedure**

- a) Janet Campbell    b) August Karl
- c) Hendry Edmund    d) William Thomas

**2. Kegel's exercise is done for**

- A) pelvic floor dysfunction
- B) coccydynia
- C) symphysis pubis dysfunction
- D) nerve compression syndrome

**3. Exercise is contraindicated in all except**

- a) placenta previa    b) preterm rupture of membrane
- c) PIH    d) musculocutaneous problem

**4. Post-natal depressive illness in cell except**

- a) maternity blues    b) rupture
- c) Postnatal depression    d) manic episodes

**5. Left side lying position is useful in**

- a) GDM    b) PIH    c) anemia    d) CPD

**6. Relaxin is produced by.....**

- a) ovaries    b) uterus    c) pituitary    d) adrenals

**7. Pelvic girdle pain is caused due to.....**

- a) sacroiliac joint dysfunction    b) lumbar sacral
- c) PS dysfunction    d) femoro pelvic dysfunction

**8 ..... % of women will experience urinary incontinence during pregnancy ?**

- a) 30-50    b) 50-60    c) 40-70    d) 80-100

**9..... % of pregnant women suffer from pelvic girdle pain and low back pain**

- a) 4    b) 5    c) 7    d) 13

**10..... weeks postpartum onwards we can see a women physiotherapist for abdominal and pelvic floor assessment**

- a) 4    b) 9    c) 6    d) 2



Assessment of course on Physiotherapy in OBG

8/10

1. Who started a nutritional system of antenatal clinic with a uniform pattern of visit and procedure

- a) Janet Campbell
- b) ~~August Karl~~
- c) Hendry Edmund
- d) William Thomas

2. Kegel's exercise is done for

- A) pelvic floor dysfunction
- B) ~~coccydynia~~
- C) symphysis pubis dysfunction
- D) nerve compression syndrome

3. Exercise is contraindicated in all except

- a) placenta previa
- b) preterm rupture of membrane
- c) ~~PIH~~
- d) musculocutaneous problem

4. Post nature depressive illness in cell except

- a) maternity blue
- b) rupture
- c) ~~Postnatal depression~~
- d) manic episodes

5. Left side lying position is useful in

- a) ~~GDM~~
- b) PIH
- c) anemia
- d) CPD

6. Relaxin is produced by.....

- a) ~~ovaries~~
- b) uterus
- c) pituitary
- d) adrenals

7. Pelvic girdle pain is caused due to.....

- a) sacroiliac joint dysfunction
- b) lumbar sacral
- c) ~~PS dysfunction~~
- d) femoro pelvic dysfunction

8. .... % of women will experience urinary incontinence during pregnancy ?

- a) ~~30-50~~
- b) 50-60
- c) 40-70
- d) 80-100

9. .... % of pregnant women suffer from pelvic girdle pain and low back pain

- a) 4
- b) 5
- c) ~~7~~
- d) 13

10. .... weeks postpartum onwards we can see a women physiotherapist for abdominal and pelvic floor assessment

- a) 4
- b) 9
- c) ~~6~~
- d) 2





# Sri Lakshmi Narayana Institute of Medical Sciences

Affiliated to Bharath Institute of Higher Education & Research  
(Deemed to be University under section 3 of the UGC Act 1956)



## CERTIFICATE OF MERIT

This is to certify that **BHARANI CHANDAR.G** has actively participated in the Value Added Course on **PHYSIOTHERAPY IN OBSTETRICS** held during Nov 2020 – Jan 2021 Organized by Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry- 605 502, India.

**RESOURCE PERSON**

ASSISTANT PROFESSOR  
DEPT. OF OBSTETRICS & GYNAECOLOGY  
Sri Lakshmi Narayana Institute of  
Medical Sciences  
OSUDU PUDUCHERRY.

**COORDINATOR**

**Prof. S. RAJASEKARAN, M.S., (Gen.)**  
DEAN

Sri Lakshmi Narayana Institute of Medical Sciences  
Osudu, Agaram Post, Pondicherry-605 502.



# Sri Lakshmi Narayana Institute of Medical Sciences

Affiliated to Bharath Institute of Higher Education & Research  
(Deemed to be University under section 3 of the UGC Act 1956)



## CERTIFICATE OF MERIT

This is to certify that **JANANI.S** has actively participated in the Value Added Course on **PHYSIOTHERAPY IN OBSTETRICS** held during Nov 2020 – Jan 2021 Organized by Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry- 605 502, India.

**RESOURCE PERSON**

ASSISTANT PROFESSOR  
DEPT. OF OBSTETRICS & GYNAECOLOGY  
Sri Lakshmi Narayana Institute of  
Medical Sciences  
OSUDU PUDUCHERRY.

**COORDINATOR**

**Prof. S. RAJASEKARAN, M.S., (Gen.)**  
DEAN  
Sri Lakshmi Narayana Institute of Medical Sciences  
Osudu, Agaram Post, Pondicherry-605 502.

**Annexure 4**

**Course/Training Feedback Form**

**Course:**

**Date:**

**Name:**

**Reg NO.**

**Department: Obstetrics and Gynaecology**

**Q 1:** Please rate your overall satisfaction with the format of the course:

- a. Excellent    b. Very Good    c. Satisfactory    d. unsatisfactory

**Q 2:** Please rate course notes:

- a. Excellent    b. Very Good    c. Satisfactory    d. unsatisfactory

**Q 3:** The lecture sequence was well planned

- a. Excellent    b. Very Good    c. Satisfactory    d. unsatisfactory

**Q 4:** The lectures were clear and easy to understand

- a. Excellent    b. Very Good    c. Satisfactory    d. unsatisfactory

**Q 5:** Please rate the quality of pre-course administration and information:

- a. Excellent    b. Very Good    c. Satisfactory    d. unsatisfactory

**Q 6:** Any other suggestions:

**Comments:**

**Thank you for taking the time to complete this survey, your comments are much appreciated.**

**OPTIONAL Section:** Name \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Annexure 4

Course/Training Feedback Form

Course: PHYSIOTHERAPY IN ANTENATAL AND POSTNATAL CARE

Date:

Name: PHARATHIK

Reg NO. U12MB221

Department: Obstetrics and Gynaecology

Q 1: Please rate your overall satisfaction with the format of the course:

a. Excellent    b. Very Good    c. Satisfactory    d. unsatisfactory

Q 2: Please rate course notes:

a. Excellent    b. Very Good    c. Satisfactory    d. unsatisfactory

Q 3: The lecture sequence was well planned

a. Excellent    b. Very Good    c. Satisfactory    d. unsatisfactory

Q 4: The lectures were clear and easy to understand

a. Excellent    b. Very Good    c. Satisfactory    d. unsatisfactory

Q 5: Please rate the quality of pre-course administration and information:

a. Excellent    b. Very Good    c. Satisfactory    d. unsatisfactory

Q 6: Any other suggestions: NILL

Comments:

Thank you for taking the time to complete this survey, your comments are much appreciated.

OPTIONAL Section: Name \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Annexure 4

Course/Training Feedback Form

Course: PHYSIOTHERAPY IN ANTENATAL AND POSTNATAL CARE  
Date:  
Name: DIVYA V.B  
Reg NO. U12MB226  
Department: Obstetrics and Gynaecology

Q 1: Please rate your overall satisfaction with the format of the course:

a. Excellent    b. Very Good    c. Satisfactory    d. unsatisfactory

Q 2: Please rate course notes:

a. Excellent    b. Very Good    c. Satisfactory    d. unsatisfactory

Q 3: The lecture sequence was well planned

a. Excellent    b. Very Good    c. Satisfactory    d. unsatisfactory

Q 4: The lectures were clear and easy to understand

a. Excellent    b. Very Good    c. Satisfactory    d. unsatisfactory

Q 5: Please rate the quality of pre-course administration and information:

a. Excellent    b. Very Good    c. Satisfactory    d. unsatisfactory

Q 6: Any other suggestions: NILL

Comments:

**Thank you for taking the time to complete this survey, your comments are much appreciated.**

**OPTIONAL Section:** Name \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_



**Date: 24.02.2021**

**From**

Dr. Nivedhana arthi  
Assistant Professor,  
Obstetrics and Gynaecology,  
Sri Lakshmi Narayana institute of Medical sciences,  
Bharath Institute of Higher Education and Research,  
Chennai.

Through Proper Channel

**To**

The Dean,  
Sri Lakshmi Narayana institute of Medical Sciences,  
Bharath Institute of Higher Education and Research,  
Chennai.

**Sub: Completion of value-added course: Physiotherapy**

Dear Sir,

With reference to the subject mentioned above, the department has conducted the value-added course titled: **Physiotherapy** on NOV 2020-JAN 2021 . We solicit your kind action to send certificates for the participants, that is attached with this letter. Also, I am attaching the photographs captured during the conduct of the course.

Kind Regards



Dr. Padma

**PROFESSOR & HEAD**  
DEPT. OF OBSTETRICS & GYNAECOLOGY  
Sri Lakshmi Narayana Institute of  
Medical Sciences  
SISUDU, PUDUCHERRY.

**VALUE ADDED COURSES**

**OBGY 2 PHYSIOTHERAPY IN OBSTETRICS**

