

Role of Physiotherapist in Obstetrics - 1

Daw Hnin Nu Aung

Assistant Lecturer

Department of Physiotherapy

University of Medical Technology, Yangon

Learning Objectives

- At the end of presentation, the student should be able to;
 - Explain the roles of physiotherapist in obstetrics
 - Advice on back care and lifting for the pregnant women

Contents

- Role of Physiotherapist
 - Complementing instructions from other team members
 - Assessment of physical health
 - Continued activities
 - Back care and lifting

Role of Physiotherapist

1. Complement instructions from other members of the team.
2. Assess physical health and identify any musculoskeletal or neuromuscular problems that could be aggravated by pregnancy. Teach leg, abdominal and pelvic floor muscle exercises.
3. Advise on continued sport or work, and how to recognized fatigue as an important sign of overactivity.
4. Advise on back care and lifting.

Role of Physiotherapist(cont.)

5. Treat any problems with appropriate physiotherapy skills.
6. Teach method of controlling neuromuscular tension
7. Teach positions that may be used for labour.
8. Teach postnatal exercises

Item (2),(3), (4) and (6) particularly should be covered in the early classes.

Complementing instructions from other team members

- The approach of to the running of the program varies but the principle of each member of the team explaining his or her role is common to all.
- The midwife is sometimes the main coordinator and instructor whereas in others it is the Physiotherapist.

Complementing instructions from other team members

- Generally, the midwife looks after the mother and baby until 10 days after the baby is born,
- the health visitor cares for the baby and the physiotherapist teaches and advices the mother throughout antenatal and postnatal care.
- The teaching of anatomy and physiology of labour is covered by a physiotherapist or midwife depending on local policy.

Assessment of physical health

- The physiotherapist should identify and try to prevent problems
- For example, a woman who has a history of backache needs special attention to perhaps strengthen weak muscles or mobilize stiff joints
- Leg exercises are taught, to keep circulation moving and to prevent varicose veins.
- Lying, move feet up, down, in, out and circle, twice daily with the leg in elevation on one occasion.

Assessment of physical health

- Standing, heel raising and lowering – this should be performed every quarter of an hour 10 times if the lifestyle involves standing for long periods.
- Abdominal contractions are taught to be practiced in sitting, lying and standing.
- Pelvic tilting and posture awareness are also taught.
- Pelvic floor contractions are taught in stride sitting with the elbows resting on knees.

Continued activities

- General exercises of walking, swimming and cycling are beneficial
- Bicycling is an excellent non-weight bearing activity (static bicycle is useful)
- Group aqua exercises are becoming popular.
- Heavy forms of exercise and unaccustomed activities (e.g. moving heavy furniture) are unwise in pregnancy because of extra stress on the top of increased weight already present, alter centre of gravity and altered blood distribution.

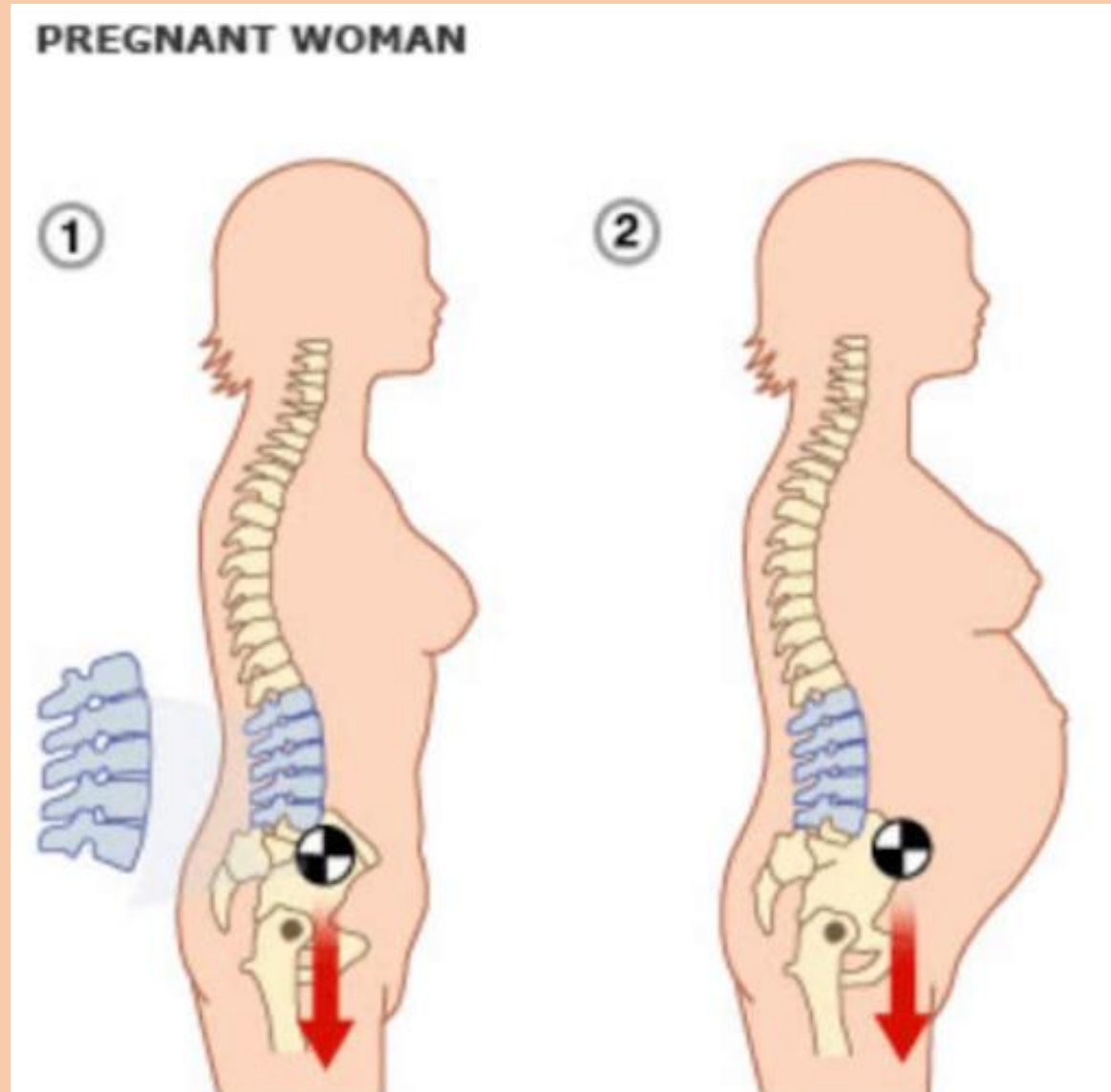
Continued activities

- Hypermobility occurs in all joints, which then vulnerable to strain and so competitive sport is not recommended.
- Level of fatigue rises more rapidly in pregnancy owing to the metabolic needs of the fetus.

Back care and lifting

- **Spinal posture has to change** with pregnancy.
- The **COG move forwards** and there is tendency to **increased lumbar curve** with consequent **stress on posterior muscles and ligaments.**
- There are also compensating changes in the thoracic and cervical spines which cause discomfort in these areas.
- It is important to teach the woman how to adopt positions which minimize stress and to change position regularly.

COG in pregnancy



Back care and lifting

- Posture advice is given in different positions.
- Attention to good posture has been shown to reduce the incidence of backache in pregnancy.

Standing

- **Stretch head up** out of the shoulders.
- Feel **baby sit in the pelvic, pull in abdominal muscles, tighten buttocks.**
- Feel poised, released tension without sagging.
- **Avoid** transferring the weight **through one leg** for long period of time.
- **Lean back against a wall or chair back** for support if standing is essential and **try to go up and down on the toes** several times to keep the circulation moving and ease muscle tension.



Sitting

- **Practice sitting back into the chair** so that it feels as if the weight of the baby is taken on the seat, and
- Try to have **the feet well supported on a little stool** if necessary.
- If sitting for a long time **pelvic tilting** should be practiced regularly.
- **A small cushion should be placed in the back** to preserved a slight lumbar curve and reduce the stretch on the posterior spinal structures.

Sitting



Sitting

- It is important when resting in sitting to have **the legs supported in slight elevation or at least horizontal.**
- If the arms are in use in front of the body the **spinal extensors are working hard** and need to be **eased by placing the hands on the pelvic along the iliac crest and extending backwards.**
- It is important to **avoid twisting** with the knees or feet apart.
- This **causes stress on sacroiliac joint**, as does stepping on to high stools or going up two stairs at a time.

Sleeping positions

- In pregnancy, sleeping positions may have to be **altered** because of **the body's weight gain and altered shape** (lying prone is not possible)
- **Quarter-turn from prone (recovery position) is acceptable** as the weight of the baby is taken on the bed.
- With a **pillow under the abdomen** and **another under the top knee** the position can be very comfortable.



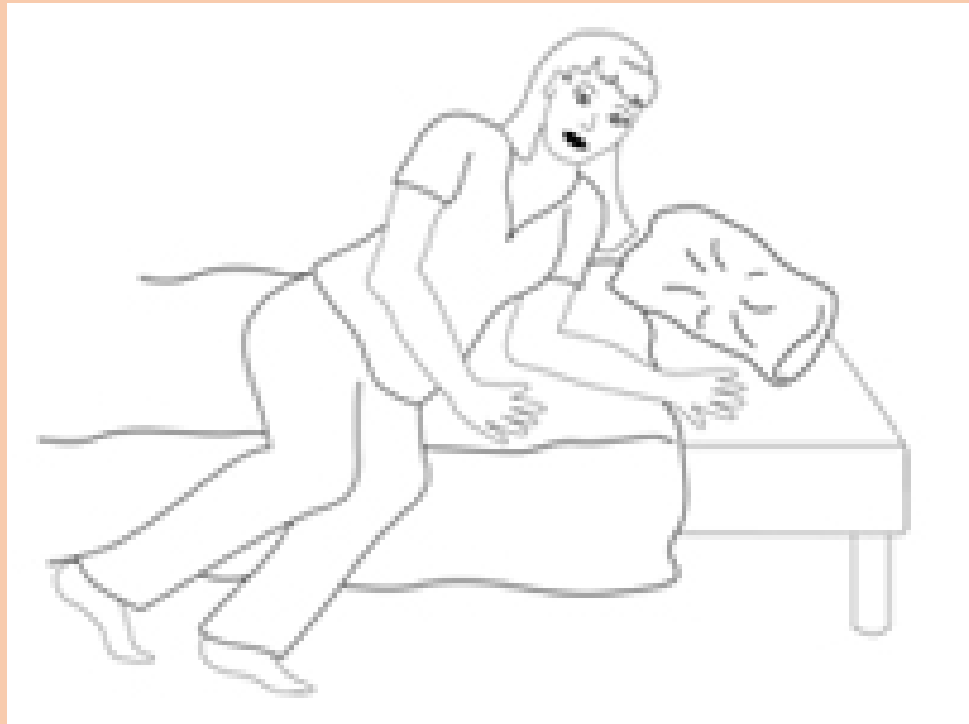
Sleeping positions



- **Sleeping supine should be avoided**
- **If necessary, a pillow under the thighs and another under the head and shoulders (perhaps two under the head) will ensure flattening and support of the lumbar spine.**

Sleeping positions

- When changing position in bed, e.g. turning, keeping the flexed knees together reduces the strain in the sacroiliac joints.
- Getting in and out of bed, the women should **go into the side lying and avoid abdominal strain from sitting up or lying straight down.**



Lifting advice

1. Lifting from a height and carrying
2. Lifting from the ground level

Lifting advice

The principles to follow are:

- Never stoop
- Feet should be apart to increase the base and
- Any object to be lifted must be held close to the body



Lifting advice

- It is important to ensure that the weight is **light enough to be lifted comfortably**.
- It may be advisable to **lift in stages** such as floor to chair and then chair to upright.
- When **lifting from a height**, it is important to **hold the object close to the body** to make sure that the height is within easy reach.
- It is **inadvisable to stand on high stools or to climb step-ladders** because balance is less secure with the centre of gravity moved forward.

Activities and back care

- **Low-down activities** should be performed from **kneeling positions** (e.g cleaning the bath, making beds or playing with small children)
- **Standing at work surfaces** is more comfortable for the back with one foot forward and possibly on a **low stool**.
- When hovering, hanging out washing or ironing it is important to ensure that the body weight is over a base with **feet apart and one in front of the other**.
- At intervals during these activities and others involving flexion it is **important to ease spinal extensor muscle tension by placing the hands on the iliac crest and easing the spine into extension**.

References

- Thomsom, A., Skinner, A. and Piercy, J. (1991) Obstetrics. In Tidy's Physiotherapy, ed. Thomsom, A., Skinner, A. and Piercy, J.; p. 396-398. 12th ed. Reed Educational and Professional Publishing Ltd in Great Britain.

Thank You

