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#### SAFE TRAVEL / COMMUNTE DURING PREGNANCY



## **Nursing**

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## **KEYWORDS**

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#### INTRODUCTION

Pregnancy is a unique, exciting and often joyous time in a woman's life, as it highlights the woman's amazing creative and nurturing powers while providing a bridge to the future. Pregnancy comes with some cost, however, for a pregnant woman needs also to be a responsible woman so as to best support the health of her future child. During pregnancy period, all women would like to travel anywhere or favorite places to explore the new things to the new arrival baby or supposed to go work in daily basis.

**Transportation** or commutation which means that the movement of persons from place to place for the various reasons. Commutation will be varied according to the trimester of the pregnancy and even more careful in complicated cases and take advise from obstetrician. First trimester (most crucial for the baby's development) 0 to 13 weeks Second trimester (Honeymoon trimester)14 to 26 weeksThird trimester27 to 40 weeks

#### **Mode Of Transportation**

- 1. Walking
- 2. Biking Motorcycle/ Scooter
- 3. Rickshaw/Autorickshaw/Toto
- 4. Cars
- 5. Buses
- 6. Trains
- 6.1. Metro / Subway travel
- 7. Air travel / Flying
- 8. Funiculars
- 9. Aerial Tramways
- 10. Sea travel

## 1. Walking

## Walking during First trimester (0 to 13 weeks)

- Advice the mother to start walking 10-15 minutes a day, three days a week, taking at least one day off between walks.
- Increase each walk by 5 minutes if she can be ready to walk another day.
- Add a 5<sup>th</sup> day of walking, after a few weeks (after 4-5 weeks)
- At the end of the first trimester, make mother to walk at least 10-20 minutes a day for at least five days a week.

#### Walking during Second trimester (14 to 26 weeks)

- Energy peaks during this second trimester so pregnant mother can increase the effort of walking speed and duration.
- Advice the mother to start walking 10-15 minutes a day, four to five days a week, taking at least one day off between walks.
- Increase longer walk by 15-30 minutes if she can be ready to walk another day.
- At the end of the second trimester, make mother to walk at least 15-30 minutes a day for at least six days a week.

#### Walking during Third trimester (27 to 40 weeks)

- Advice the mother to prepare to slow down as belly gets bigger.
- Decrease the length of walking and take frequent breaks between short walks or sessions if energy gets slow.
- Encourage mothers to reduce the speed and distance of walks as pregnancy progresses.
- Be cautious with the rupture of membrane, onset of labor, less fetal movements, abnormal bleeding etc.
- Advice the mother to start walking 10-15 minutes a day, four to six days a week, taking at least one day off between walks.
- At the end of the third trimester, make mother to walk at least 15-30 minutes a day for five to six days a week with breaks.

#### Before travel start, just follow the below things.

- Always carry antenatal check-up hospital notes, medical reports.
- Keep memorize date of delivery or EDD.
- For safety, carry prescribed pain killers, anti- emetics drugs and other regular medication such as vitamins, calcium tablets from the doctor and avoid over- the- counter medication like painkillers.
- Always carry sanitary napkins for sudden vaginal leaking, unusual bleeding due to strain of long travel leads to complicated situation immediately rush to the near hospital.

#### 2. Biking

#### Safe commute by Bike

- People are commonly using the mode of transport is motorcycle or scooter for the antenatal checkup especially in the rural areas.
- Pregnant mother acts as a ridding pillion and sometimes rider for workplace.

#### Instructions

- Remember there is no seat belt in motorcycle but use safety holding bar for protection.
- Avoid motorcycle/ bike traveling for the mother who has history of hypertension/ giddiness, blurred vision and difficulty in balancing, co-ordination leads to easy fall.
- Advise her to sit with legs on each side of the seat to get protected from a jerk or bump and prevent fall.
- Encourage her to use loose cloth such as maternity gowns, cotton salwar, kurti suits for the comfortable sits on the seat.
- Try to avoid wearing saree and sort of shawl during riding bike or motorcycle which may have chance to stuck in the wheelchair leads to fall and rarely accident.
- Instruct the couple to take a smooth pathway without potholes and drive with careful.
- Go smoothly with speed breakers and slide over bumps.
- Follow the traffic rules while riding and use appropriate indicators and symbols before each turning point and signals.
- Do not rush into riding and maintain good speed with no zigzag trespassing.

### 3. Rickshaw/Autorickshaw/Toto (Share auto)

- This is another mode of cost-effective public transportation to anywhere.
- There is chance to go with strangers and be more cautious when go with others.
- There is no seat belt but safety features like holding bar on the side, but it is limited if she has a chance to sit on another side.
- Inform driver before getting into the vehicle regarding that you are a pregnant to make them to go slow and steady, drive gently.
- Instruct them to follow the traffic rules accordingly.

#### 4. Cars

- The most preference commute for the all the middle-class people in India is CAR by road.
- While she selects car as a commutation, give advice to them for the safe travel
- Short distance of Car travel is safe for any age of gestational week.

#### Good to avoid long car trip because it will cause deep vein thrombosis, but incase of need to take car travel follow the below instructions:

- Wear seat belt with cross strap between breast and buckle the lap strap across pelvis under bump but not across bump. Maintain good air-circulating in the car.
- Stop the car in each approximate distance frequently and take

- break by moving around and stretch, go to rest room, have some snack and drink to reduce tiredness, fatigue, dizziness, and discomfort.
- Carry energy-rich foods such as fruit and nuts and eat at regular interval.
- Keep pillow under the neck for neck pain and both legs to reduce the risk of fluid accumulation like edema etc. and improve the blood circulation during long travel.
- Do some exercise in the car such as flexing and rotating both feet and wiggling the toes to reduce muscle stiffness.
- Wear anti-embolic or compression stockings for > 4-6 hours travel to prevent blood clots.
- Encourage driver to maintain normal speed, avoid over speed.
- Make frequent breaks to stretch legs and visit the toilet.
- Avoid wearing the lap sash across the bump as a sudden jolt may cause placenta to separate from uterus.
- If you are sitting in the front passenger seat, move the seat well back from the dashboard to reduce airbag impact in case of a collision.
- If you are driving, have the seat as far back from the steering wheel as possible, while still being able to drive safely and comfortably. It may help to tilt the steering wheel downwards, away from your belly.
- If you are involved in a collision, however minor, notify doctor.
- If she has contractions, pain, or bleeding after an accident, see a
  doctor as soon as possible. Let them know if she is a rhesus
  negative blood group, as she may need to have an anti-D injection.

#### 5. Public transport/Bus travel

- Travelling by bus during pregnancy is mostly safe and follow certain rules.
- Becareful in first and third trimesters as these are the significant months of pregnancy.
- Educate her about risks and precautions to reduce consequences on bus travel.

#### Risks on Bus travel

- Sitting for long hours in bus can cause swelling in feet and risk of blood clots.
- Difficult to relax or sleep while sitting in an upright position.
- As there are no seat belts on the bus, you may experience shakes and jerks constantly, which may not be good for baby's health. Lack of seat belts increase the risk of accidents too.
- Bus travels can be utterly exhausting and discomforting in pregnancy. The entire process of waiting for the bus, sitting on the bus and the long travel hours can put her at great discomfort and uneasiness.

## Precautions

- Do Not Stand in a Moving Bus
- Standing in a moving bus has risk of falling and losing balance, risk of pushing by another passenger. If no seat, ask someone else for their seat, but avoid standing.
- Be Open about Pregnancy
- The best thing is that she can reveal the pregnancy with the people around her and the bus conductor especially in first trimester because of invisible tummy.
- By informing the bus conductor, you will get help as and when required and even the driver will be more careful on the road.
- Choose a Comfortable Seat
- Try to find a seat in the middle (or front) of the bus while commuting to work and opt for a front seat in case of a long journey.
- Take the aisle seat for more leg space and for moving around easily when the bus stops.
- Travel with a family member or a Friend
- Plan to go with family member or friend for the long journey because require trustworthy assistance with different things.
- Pack light and always keep ready emergency contacts in case of travel alone. Also, keep doctor's number on speed dial.
- · Pack Food and Water.
- Make safe choices while pregnant carry home-cooked food and a water bottle.
- Eat healthy avoid fried or spicy foods while travelling as it may cause nausea or heartburn.
- Move Around Whenever Possible
- If she has plan to go out of town by bus, there will be halts. Make sure that get out of the bus at a halt and move around.

- Use the washroom and move around for a while to relieve any kind of muscle stiffness and to stretch arms and legs.
- Only carry the essentials, but make sure this includes a bottle of water
- Wear layers that are easy to remove when it gets hot.

#### 6. Train

- The best mode of transport for the pregnant women till 36 weeks if travelling time is more than three hours for the regular and frequent ambulation
- Regardless of few shakes and irregular train motions that shoot-up morning sickness, still the best transport during pregnancy.
- Taking the train during pregnancy does not present any particular risk, either for the fetus or for the mother. Indeed, the train has no impact on the risks of miscarriage, premature delivery, or water loss.
- Nevertheless, obstetrician advisable to follow some precautions strictly to ensure for safe and smooth journey.

#### 6.1. Metro/Subway travel

- In some states, there is a rule to allow pregnant woman to use separate entry and exit gates at all its Metro stations.
- Under the new system, pregnant women taking the Metro will still
  have to swipe their cards or drop the tokens at the automatic fare
  collection (AFC gates) but will be allowed to enter and exit
  through the service gates that are there in all stations.

# Follow the below Precautions for both electric and metro train travel during pregnancy.

- Choose the lower berth instead of the middle or upper berth in the sleeper coaches.
- Choose a place in middle of wagon, where vibrations are less important than above the wheels.
- Pick a seat on the aisle side as she can get up and move around easily on board the train.
- Encourage her to take a few regular steps in the central aisle to stimulate venous return, regulate blood circulation and avoid the heavy legs sensation.
- Instruct her to take heavy less luggage or go with the option of porter to carry the things.
- To minimise motion sickness, eat light meals and keep her hydrated regularly.
- As a local commuter on travelling daily within the city by working pregnant women, try and avoid the super-rush hours where need to stand for long and train is jam-packed with commuters.
- Wear comfortable and sturdy footwear like sneakers or flats which
  make it easier to maintain the balance in a moving train. Watch out
  for stray shoes, spilt water or food, and pieces of luggage poking
  out along the passages when walking.
- Hold onto something when standing by Whenever need to get up
  while the train is moving, only take a step forward if have a good
  grip on a seat or handle for support. Trains can sometimes jerk
  suddenly, so it's best to be prepared. When going to the toilet,
  always keep a hold of the handlebar that is usually attached to the
  wall.
- Lock all bags by carry a chain and lock to secure luggage so that no
  worries about them when leaving from the seat to go to the
  washroom.

#### 7. Air Travel

As long as no risky pregnancy, air travel is safe till 36 weeks of pregnancy.

- All airlines will allow travel till 28 weeks of pregnancy, and many allow till 34-36 weeks, not recommended after 36 weeks.
- Enquire from the airlines before booking tickets in last third trimester pregnancy.
- It is recommended also to not travel by air in certain conditions like pre-eclampsia, placenta previa / low lying placenta if twin or triplet pregnancy or in labor.
- Traveling to areas in the world where Zika virus outbreaks have been reported is not recommended during pregnancy.

#### Before you decide to travel by plane:

- Discuss any potential risks particular to your pregnancy with your doctor.
- For example, a woman with gestational diabetes or a multiple pregnancy is generally advised not to fly.
- Be aware that air travel in the last six weeks of pregnancy could

trigger premature labour.

- Check with the airline some airlines won't allow a woman over 35 weeks to fly at all, or they require a doctor's note.
- Check the fine print of your travel insurance some policies may not cover pregnancy.
- Arrange with the airline for a bulkhead seat or a seat near an exit for extra leg room.
- Consider booking an aisle seat going to the toilet will be a little
- Before leaving, discuss with doctor whether you need to travel with a medical kit.
- Remember to pack this kit in your carry-on luggage so you can access it during the flight.

#### Items your medical kit could contain:

- Preparations to help you treat common pregnancy complaints such as heartburn, thrush, constipation, and hemorrhoids.
- Oral rehydration preparations in case of traveller's diarrhoea
- Multivitamins formulated for pregnant women.
- Urine dipsticks to check glucose levels (if required).

#### **During the flight:**

- Wear your seatbelt under your bump and across your lap.
- Stretch and move your legs regularly while seated. Consider wearing support stockings for the duration of the flight. A pregnant woman's circulation is already under strain - the lower cabin pressure inside a plane can theoretically increase the risk of blood
- Drink plenty of water to reduce the risk of dehydration. Keeping up your fluid intake will also reduce the risk of DVT.
- If the flight is smooth, walk up and down the aisles every half hour.
- If the flight has turbulence, stay in your seat, but flex and extend your ankles frequently.
- If you are feeling short of breath or light-headed, ask one of the flight attendants to give you breathing oxygen.
- Inside the airplane, move out of her seat once every 30 mins and walk down the aisle.
- Choose an aisle seat as this will help straighten legs and move in and out easily.
- Always wear a seat belt.
- Do frequent leg exercises.
- Walk regularly (in case air travel, walk around the aircraft cabin if the flight is smooth).
- Avoid dehydration by drinking plenty water.
- Minimize alcohol and caffeine intake.

#### 8. Funicular

- A funicular is a type of cable railway system which connects points along a railway track laid on a steep slope.
- Riding a funicular is a thrilling experience for everyone. The people who living in hill station using this mode of transportation commonly especially the pregnant mothers go for antenatal checkup regularly with this.
- Pregnant women are strictly to avoid during 3<sup>rd</sup> trimester to change altitudes > 800 meters.
- Follow the advice of the doctors before planning to ride in funicular.
- Funicular lift gives a very quick ride from one high altitude to another same or even higher altitude where less O<sub>2</sub> and temperatures occur.

## 9. Aerial Tramways journey

An aerial tramway, sky tram, cable car, ropeway or aerial tram is a type of aerial lift which uses one or two stationary ropes for support while a third moving rope provides propulsion.

- Aerial Tramway takes up from the desert floor to the top of the Mountains.
- It will be climbing a lot of altitude, but the aerial tramway is safe for pregnant women if take the normal precautions.
- The trams are 360-degree rotating trams so if get motion sick easily, then recommended skipping this activity during travel in aerial tramways.
- Pregnant women are allowed, but we always suggest consulting with obstetrician first.
- The altitude change is approximately 6,000 feet during the 10minute ride.
- Windows are open to allow for ventilation.
- The weather at Mountain Station is typically 30-40 degrees cooler

than on desert floor.

#### 10. Sea travel

- Surprisingly, the first trimester is the riskiest because of the greater likelihood of miscarriage during early stages of pregnancy.
- Also, prone to get morning sickness during the first trimester and feeling nauseous will certainly ruin boating trip.
- In general, the second trimester is the most comfortable time to go boating while pregnant.
- By this time, pregnancy is settled, and morning sickness has mostly passed, and baby bump is not yet big enough to throw off the balance.
- Although it is usually comfortable to go boating in the third trimester but should take extra cautious. Balance is likely to be a little off due to the size of growing baby and belly.
- Not only that, but the expected date delivery is also very closer.
- Even choosing boat travel for relaxation, sometimes unexpectedly mother will go to in labor at any time.
- Rough water and speeding along in the boat are sure to make for a bumpy ride, and that's not a good idea at any stage of pregnancy.

#### Precaution on sea travel

- Encourage her to remain seated.
- Hold something like handlebar and try to ambulate and move slowly if getting tired or for the regular interval.
- Avoid walking on the bow or anywhere else that can make her feel less stable.
- Advise to bring life jacket on anytime because the boat is in motion.
- Keep the Ride as Steady as Possible.
- Stick to calm water and go at a slower speed for reducing the bounce up and down.
- Good idea to stay closer to shore if boating during any stage of pregnancy.

#### Instructions to follow things for travelling in hot weather to prevent hot and sun exposure.

- Carry a water bottle and drink frequently.
- Stay in shade/inside during hottest part of day.
- Protect skin by wearing loose-fitting clothing, a hat and sunscreen.
- Avoid rushing or overexertion plan activities and give plenty of time for that.

#### CONCLUSION

Traveling is significant for mental, emotional growth and human happiness. It's important to maintain a continual pattern of learning and awareness throughout one's lifetime, prevent boredom, explore new experience and traveling is great way to do that. But the thing is that pregnant women should caution whenever she travels either long or short distance.

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