



## A REVIEW ON RISK FACTORS DURING 20'S VS 30'S PREGNANCY

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### Abstract

The first trimester is the most critical stage of development during which the rudiments of all the major organ systems appear. The second trimester is characterized by the nearly complete development of organ systems. The third trimester represents a period of rapid fetal growth. The risks related to pregnancy in those over 35 years, old, especially primiparity. The higher rates of fertility (age specific fertility rate) were seen in women from 25-29 years or from 30-34 years<sup>29</sup>. Women are still considered to be the sole responsible for pregnancy, while men continue being absolved or omitted from their participation in the reproductive even. One of the most common risk factors for a high risk pregnancy is the age of the mother. Women with age under 17 or over 35 are at greater risk of complications than those between their late teens and early 30s<sup>35</sup>. It is advantageous to diagnosis the pregnancy as promptly as possible when a sexually active woman misses a menstrual period or has symptoms suggestively of pregnancy. In the event of Desired Pregnancy, prenatal care can begin early and potentially harmful medications and activities such as drug and alcohol use, smoking and occupational chemical exposed can be halted.

**Key Words:** Pregnancy, Risk Factors, Menstrual Period and Fertility.

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### INTRODUCTION

Pregnancy is a sequence of events that begins with fertilization, proceeds to implantation, embryonic development, and the fetal development, and normally ends with birth about 38 weeks later, or 40 weeks after the last menstrual period .From fertilization through the eight week of development, a stage called the embryonic period, the developing human is called an embryo. Embryology is the study of development from the fertilized egg through the 8th week. The foetal period begins at 9th week and continues until birth, during this time, the developing human is called a foetus. One sperm and a secondary oocyte have developed through meiosis and maturation, and the sperm have been deposited in the vagina, pregnancy can occur. Fetal development, it is divided into three periods of three calendar months each, called trimesters. The first trimester is the most critical stage of development during which the rudiments of all the major organ systems appear. The second trimester is characterized by the nearly complete development of organ systems. The third trimester represents a period of rapid fetal growth<sup>1</sup>.Pregnancy is largely unknown among women with chronic kidney disease (CKD) and end stage renal disease (ESRD)<sup>2</sup>. Incidence of conception among dialysis patients ranges from 1% - 7%<sup>3</sup>. If a pregnant women with chronic renal insufficiency posses a higher maternal and fetal morbidity. Although, pregnancy in women with chronic renal insufficiency is considered a largely high risk pregnancy<sup>4,5</sup>. Adolescent pregnancy is defined as a pregnancy in girls 10 - 19 years of age. It is estimated that about 16 millions girls 15- 19 years old give birth each year, contributing nearly 11% of all birth world wide<sup>7</sup>. More than 90% of these births occur in low and middle - income countries<sup>6,8</sup>. The median age of women at first sexual intercourse is now 16.6

years<sup>9</sup>. Approximately 90% of teenage pregnancies in the developing world are of girls who are married, owing to their high exposure to sex and pressure to conceive quickly after marriage<sup>10, 11, and 12</sup>. Studies have shown that teenage pregnancy has poor maternal and prenatal health outcomes<sup>7, 10, 13, and 14</sup>. Complications during pregnancy and childbirth are the second cause of death for 15 - 19 years old girls globally<sup>7</sup>.Every year, some 3 millions girls aged 15-19 undergo unsafe abortions<sup>6,7</sup>. Babies born to adolescent mothers face a substantially high risk of dying .then those born to women aged 20 - 24<sup>6,7,15</sup>. school dropout, poverty, high rate of marriage, pregnancy - induced hypertension, induced abortion, preterm delivery, low birth weight, still birth, and high fetal and neonatal mortality<sup>14,16,17,18,19</sup>.For instance the risk of having a baby with down syndrome exponentially increases after 36 years of maternal age<sup>20,21,22</sup>. On one side scientific literature more and more clearly says that the less risky range of maternal age to bear babies is 20-30 years and on the other side, People perceive they should postpone pregnancy<sup>20, 23, and 24</sup>. Gestational diabetes mellitus (GDM) was historically defined as "Any degree of glucose intolerance with onset or first recognition during pregnancy" whatever the treatment course and postpartum evolution<sup>25,26</sup>.The risks related to pregnancy in those over 35 years, old, especially primiparity<sup>27,28</sup>. The higher rates of fertility (age specific fertility rate) were seen in women from 25-29 years or from 30-34 years<sup>29</sup>. Women are still considered to be the sole responsible for pregnancy, while men continue being absolved or omitted from their participation in the reproductive even<sup>30,31,32</sup>.

## COMMON RISK FACTORS

One of the most common risk factors for a high risk pregnancy is the age of the mother. Women with age under 17 or over 35 are at greater risk of complications than those between their late teens and early 30s<sup>35</sup>.

### 1. RISK FACTORS IN 20'S

Women under the age of 20 have a significantly higher risk of serious medical complications related to pregnancy than those over 20<sup>33</sup>. Even if you are healthy when you become pregnant, it is possible to develop or be diagnosed with problems during pregnancy that can affect you and your baby<sup>35</sup>. Pregnant teens are more likely to develop pregnancy related high blood pressure and anemia(lack of healthy red blood cells) and to go through preterm (early) labor and delivery than women who are older<sup>34</sup>. Teens are also more likely to not know they have sexually transmitted infection(STI). Some STIs can cause problems with the pregnancy or with the baby<sup>38</sup>. Teens may be less likely to get prenatal care or to keep prenatal appointments<sup>34</sup>.prenatal care is important because it allows health care providers to evaluate, identify, and treat risks, such as counseling teens not to take certain medications during pregnancy, some times before these risks become problems<sup>39</sup>.

Teenage mothers are more likely to:

- Deliver prematurely
- Have a baby with low birth weight
- Experience pregnancy induced hypertension
- Develop preeclampsia

Some risk factors connected to young age include the following:

- **Under developed pelvis:** Young women bodies are still growing and changing. An under developed pelvis can lead to difficulties during child birth.
- **Nutritional deficiencies:** Young women are more likely to have poor eating habits. Nutritional deficiency can lead to extra strain on the body that causes more complications for both the mother and child.
- **High blood pressure:** Developing high blood pressure in pregnancy can trigger premature labor. This can lead to premature or under weight babies who require specialized care to survive<sup>37,38</sup>.

### 2. RISK FACTORS IN 30's:

As you age your chances of conceiving begin to decline. An older woman who becomes pregnant is also less likely to have a problem- free pregnancy<sup>37,38</sup>.Older first time mothers have normal pregnancies, but research shows that older women are at high risk for certain problems than younger women<sup>40</sup>, including:

- Pregnancy related high blood pressure (called Gestational hypertension) and diabetes (called gestational diabetes)<sup>41</sup>.
- Pregnancy loss<sup>42</sup>.
- Ectopic pregnancy (when the embryo attaches itself outside the uterus), a

condition that can be life threatening<sup>43</sup>.

- Cesarean (surgical) delivery.
- Delivery complications, such as excessive bleeding.
- Prolonged labor (lasting more than 20 hours).
- Labor that does not advance.
- Genetic disorders such as Down syndrome, in the baby<sup>41</sup>.
- Decline in fertility.
- Still birth<sup>36</sup>.
- Preeclampsia (high blood pressure, urinary protein and swelling) <sup>35</sup>.

## PRECAUTIONS DURING PREGNANCY

- It is advantageous to diagnosis the pregnancy as promptly as possible when a sexually active woman misses a menstrual period or has symptoms suggestively of pregnancy.
- In the event of Desired Pregnancy, prenatal care can begin early and potentially harmful medications and activities such as drug and alcohol use, smoking and occupational chemical exposed can be halted.
- In the event of unwanted pregnancy, counseling about adoption or termination of pregnancy can be provided at an early stage<sup>44, 45</sup>.

### A. Prenatal visits

It should be begin early and maintain a schedule of regular prenatal visits:-

- 4-28 weeks= Every 4 weeks
- 28-36 weeks= Every 2 weeks /fortnight
- >36 weeks=Weekly.

### B. Diet

- Advised to eat balanced diet.
- Prenatal vitamins with Iron and Folic Acid should be prescribed.
- Supplements that are not specified for pregnant women should be avoided as they may contain dangerous amounts of harmful vitamins.
- Caffeine (i.e., Coffee, Tea or Caffeinated cola drinks) should be decreased to 0-1 cup.
- She should be encouraged to eat fresh fruits and veggies and advised to avoid raw meat and fish (they contain mercury).

### C. Medication

Only prescribed / Authorized by obstetricians should be taken.

#### Teratogenic / Fototoxic drugs

Ace inhibitors	Alcohol
Anti epileptics	Benzodiazepines
Chloramphenicol	Estrogens
Griseofulvin	Isotrenoin
Methotrexate	Mesoprostal
NSAIDs	Opioids
Reserpine	SSRIs
Sulfadruugs	Tetracyclines
Tobacco	Trimethoprim
Warfarin	Other anti coagulants

**D. Radiography & Noxious Exposures**

- Only prescribed or Authorized radiography should be performed
- Abdominal shielding should be used whenever possible.
- Excessive heat in hot tubes should be avoided.
- Patient should be told to avoid handling cat feces/cat litter and to wear gloves when gardening to avoid infection with toxoplasmin.

**E. Physical activity and Rest**

- Regular exercise can be continued at a mild level.
- Weight lifting, hazardous exercises or new athletic training programs should be avoided.
- Patient should be encouraged to obtain adequate rest daily.

**F. Nutrition in pregnancy**

Recommendations regarding the weight gain in pregnancy. It should be based on BMI.

WOMEN'S BMI	TOTAL WEIGHT GAIN
Normal:	11.3-15.9 kgs
Over weight:	6.8-11.3kgs
Obesity/obese women:	5-9.1kgs

- Excessive weight gain has been associated with increased birth weight and as well as post partum retention.
- Significantly low weight gain leads to low birth weight.
- Calcium=1200mg/day @pregnant met with milk and milk products , veggies, soya beans, corn and calcium carbonates supplements.
- Iron =30-60mg
- Folic Acid=0.5-0.8mg<sup>44,45</sup>.

**MANAGEMENT FOR THE DURING RISK FACTORS PREGNANCY****1. Morning sickness**

Preventing vomiting result in:

- weight loss,
- dehydration,
- starvation ketosis,
- hypokalemia and
- Hyperchloremic alkalosis.

It's more common in multi foetal pregnancy or hydantoid pregnancy.

**Treatment****a. Non-pharmacological treatment:**

- It is recommended to give nothing by mouth until the patient is improved from vomiting.
- After that maintain hydration & electrolyte balance via parenteral fluids & vitamins supplements.
- Follow dry diet consists of six small feedings daily.

**b. Pharmacological-treatment: Because of possible teratogenicity, in most instances only reassurance and dietary advice are required.****1<sup>st</sup> line treatment**

vitamin-B6(pyridoxine) 60-100mg/day.

**2<sup>nd</sup> line treatment**

Promethazine @25mg P/Oor IV

Or

Ondansetron @4- 8mg P/O or IV

**3<sup>rd</sup> line treatment**

Corticosteroids (rare) <sup>44,47</sup>.

**2. Recurrent (habitual) Abortions**

It is defined as loss of 3 or more preivable pregnancies in succession. Only 1% of couples are affected with recurrent abortions. i.e., during <20 weeks of gestation or 500gms of fetus.

**Management of Pre conception****a) Non pharmacological treatment**

- Hysteroscopy: - Saline infusion sonogram or hysteroscopy can be used to exclude submucosal myomas and congenital anomalies of uterus.

**b) Pharmacological treatment**

- Low molecular weight heparin
- Aspirin
- IV immunoglobulins
- Corticosteroids

**Post conception**

Early prenatal care & scheduled frequent office visits. Empiric sex steroid hormone therapy should be done<sup>44,48</sup>.

**3. Ectopic pregnancy**

No intrauterine pregnancy on trans vaginal ultra sound and adrenal mass by clinical examination or ultra sound. About 98% of ectopic pregnancies are tubular and other like peritoneum /Abdominal viscera, ovaries and cervix.

**Treatment****a) Non pharmacological treatment**

- Surgical treatment is definitive, initial surgery is diagnostic laparoscopy, it depends on the pregnancy.
- Salpingostomy with removal size of ectopic of Ectopic pregnancy or complete salpingectomy can usually performed<sup>44,49</sup>.

**b) Pharmacological treatment:**

- For patients with normal LFT&RFT @ Methotrexate 50mg/m<sup>2</sup>M, But it is contra indicated in unstable patients.
- Iron therapy for anemia may be necessary during convalescence<sup>44,49</sup>.
- Rho (D) immunoglobulin 300mcg should be given to Rh -ve patients.
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**3. Preeclampsia- Eclampsia**

The presence of newly elevated BP (140/90 mm of Hg) and proteinuria (0.3 g in 24 hours) during pregnancy (> 20 weeks) is called preeclampsia.

**SEVERE PREECLAMPSIA****Associated with**

- kidney injury,
- thrombocytopenia,
- HELLP ,(hemolysis, elevated liver enzymes, low platelets),

- pulmonary edema and
- Changes in vision or headache.

## ECLAMPSIA

Seizures in patient with evidence of preeclampsia.

### Treatment for preeclampsia:

#### 1) Non pharmacological treatment

- In clinical studies, the dietary changes, diuretics have not been continued to be useful.
- The only cure is in delivery of the foetus at a time as favorable as possible for its survival.
- However, when a women is clearly suffering with a preeclampsia ,delivery should not be delayed for fetal lung maturation or administration of corticoids
- The method of delivery is determined by the maternal and fetal status.
- Vaginal delivery is performed. Because, it has less blood loss than C - section.

#### 2) Pharmacological treatment

If the fetus is < 34 weeks of gestation, the choice of treatment is:

**Corticosteroids:** Betamethasone 12mg/ day IM  
or

Dexamethasone 6mg @ 12 hours IM for 4 doses

### Treatment for Eclampsia

#### 1) Emergent care

If the patient is convulsing. To stop the seizures

**1<sup>st</sup> line:** Magnesium sulfate@4 – 6 gms IV bolus  
(or) Lorazepam 2 – 4 mg @ 4 mins.

**2<sup>nd</sup> line:** Calcium gluconate@1gm IV for 2mins

#### 2) General care

Rx

- Magnesium sulfate IV 4 – 6 gm @ 15-20 mins for seizure prophylaxis
- To decrease blood pressure – Labetalol 10 – 20 mg IV @ every 20 min

#### 3) Delivery

- Vaginal delivery is preferred.
- To induce labor – Oxytocin given IV and titrated to a dose that results in adequate contractions.
- C-section with regional/general anesthesia is acceptable for the usual obstetric indication<sup>44,50</sup>.

#### 4) Pre term Labor

It is defined as delivery prior to 37 weeks of gestation and spontaneous preterm labor with or without premature rupture of the foetal membranes is responsible for at least 2/3 of all preterm births.

### Treatment

A single short course of corticosteroids should be administered to promote foetal lung maturity and also to reduce respiratory distress syndrome , ICH and even death in preterm infants.

Rx

Betamethasone 12 mg/ day IM OD

(or)

Dexamethasone 6mg IM BD

## TOCOLYTIC AGENTS

To initial management of preterm labor and may provide sufficient prolongation of pregnancy to administer a course of corticosteroids

Rx

- Magnesium sulfate@ 4 – 6gms IV Bolus followed by 2g/h infusion.
- Beta adrenergic drug: Terbutaline 2.5 mcg /min IV infusion (or) 250 mcg subcutaneous injection.
- Nifedipine 20 mg P/O QID + Indomethacin 25mg / 50 mg P/O QID @ up to 48 hrs<sup>44,51</sup>.

#### 5. Third - trimester bleeding

5-10% of women have vaginal bleeding in late pregnancy.

**Placental cause:** Placenta previa , placental abruption , vasa previa.

**Non placental cause:** Labor, infection, disorders of lower genital tract, systemic disease

### Treatment:

- General measures: Anti - D Immunoglobulin may be required for women with Rh -ve transfusion of blood for hypovolemia.
- Morbidly adherent placenta: After delivery of infant, the morbidly adherent placenta doesn't separate normally , and the bleeding that results can be torrential emergency hysterectomy is usually required to stop the hemorrhage<sup>44,52</sup>.

#### 6. Gestational diabetes mellitus:

Gestational diabetes mellitus is abnormal glucose tolerance in pregnancy and is generally believed to be an exaggeration of pregnancy induced physiological changes in carbohydrates metabolism.

### Diagnosis

The gestational diabetes mellitus is measured<sup>50</sup> 5 – 10 more of the following venous plasma concentration are met or exceeded.

Fasting: 95 mg / dl

Post Parandial (1 hr): 180 mg/dl

(2 hr):155 mg/dl

(3 hr): 140 mg/dl

### Treatment:

#### 1. Non Pharmacological Treatment

##### Early Nutritional Counseling

- Regular simple exercises.
- Sugar free diet.
- Portion control with adequate nutritional intake.

#### 2. Pharmacological Treatment

**1<sup>st</sup> line:** oral hypoglycemic agents

Rx

1. Glyburide.

2. Metformib.

**2<sup>nd</sup> line:** Insulin Lyspro, Insulin Aspart.

## CONCLUSION

"Prevention is better than cure" is the moral. On one side scientific literature more and more clearly says that "the less risky range of maternal age to bear babies is 20 – 30 years". As per our study, "the best age to conceive is late 20 and early 30." Early diagnosis plays a major role in the better outcomes. On the other side; people perceive they should postpone pregnancy. While twin pregnancy is associated with increased risk for most adverse perinatal outcomes, this analysis did not find advanced maternal age to be an additional risk factor for foetal death and infant death. Preterm birth risk was relatively low for women in their late 30s. Risks for adverse outcomes were higher among younger women and further research is indicated to improve outcomes for this demographic group. Results confirm previous reports that women conceiving through ART may have a qualitatively different experiences of pregnancy with higher pregnancy specific anxiety juxtaposed with more intense maternal – foetal attachment and lower levels of depression and general anxiety symptoms. It is also important to acknowledge that this study has assessed well being only in those women who successfully achieved a pregnancy that survived until the third trimester. The amount of time pregnant women spend in moderate vigorous physical activity or volitional exercise varies drastically depending upon what guidelines are used. Previous reports regarding the prevalence of physical activity during pregnancy have ranged from as low as 3% to as high as 78%. The large range is due in part to the multiple different guidelines that have been used in these studies and the interpretation of these guidelines (e.g., accumulated activity and activity in bouts).

## REFERENCES

1. Ahmed Abu-Zaid, Ahmed Nazer, Osama Alomar, and Ismail A. Al-Badawi. Successful pregnancy in a 31 year old peritoneal dialysis patient with bilateral nephrectomy. DOI:<http://dx.doi.org/10.1155/2013/173405>.
2. J.L.Holley, S.S .Reddy,"pregnancy in dialysis patients:A review of outcomes ,complications and management", seminar in dialysis, Vol 16, No.5,pp.384- 388,2003.
3. S.S Reddy and J.L. holley, "Management of the pregnant chronic dialysis patient,"Advances in chronic kidney Disease, Vol 14, No.2, pp.146-155,2007.
4. S.Hou, "Pregnancy in chronic renal insufficiency and end-stage renal disease,"American Journal of kidney Diseases, Vol.33, No.2, pp.235- 252,1999.
5. Yohannes Ayanaw Habitu, Anteneh Yalew, Telake Azale Bisetegn, Prevalence and Factors associated with Teenage pregnancy, Northeast Ethiopia, 2017: A Cross-sectional Study,DOI:<https://doi.org/10.1155/2018/171452> 7.
6. WHO, "Adolescent pregnancy fact sheet," 2014.
7. WHO, Guidelines on preventing early pregnancy and poor Reproductive Outcome among Adolescents in Developing Countries, WHO, Geneva, 2011.
8. Central Statistical Agency and The DHS program ICF, The DHS program ICF Rockville M, USA Ethiopian Demographic and Health survey, Vol :201, CSA and ICF ,Addis Ababa, Ethnopia and Rockville,MD,USA,2012.
9. O. Ayuba Gam : Outcome of teenage pregnancy in the Niger Delta of nigena
10. , "Ethiopian Journal of health sciences . Vol. 22, No.1, pp. 45-50, 2012. A Erulkar, "Adolescence lost: The realities of child manage." Journal of Adolescent Health, Vol, 52, No. 5, pp. 513-514, 2013.
11. T. Alemayehu. J. Haider, D Habte. "Determinants of adolescent fertility in Ethiopia," Ethiopian journal of Health Development, Vol. 24, No.1 ,pp. 30- 38,2010.
12. UNFPA, "Motherhood in childhood, facing the challenge of adolescent pregnancy, state of world population," 2013.
13. G. Qazi, "Obstetric characteristics and complications of teenage pregnancy ,Journal of Postgraduate Medical Institute , vol. 25, no. 2, pp. 134-138, 2011.
14. E. Presler-Marshall and N.Jones, "Charting the future: Empowering the girls to prevent early pregnancy,"2012.
15. H.U. Ezegwui, L.C .Ikeako, F Ogbuefi, "Obstetric outcome of teenage pregnancies at a tertiary hospital in Enugu, Nigeria," Nigerian journal of clinical practice, vol. 15, no. 2, pp. 147-150, 2012.
16. T. Ganchimeg. E. Ota, N.Morisaki et al., "pregnancy and child birth outcomes among adolescent mothers: a World Health Organization multicountry study,"BIOG:An International Journal of obstetrics and Gynaecology, vol. 121, pp. 40-48,2014.
17. A Kumar, T. Singh, S. Basu, S. Pandey, and V. Bhargava, "Outcome of teenage pregnancy, "The Indian Journal of Pediatrics, vol. 74, no. 10, pp. 927- 931, 2007
18. G.Woldemichael, "Teenage Childbearing and its Health consequenceson the mother and child in Eritrea," Journal of the Eritrean Medical Association , vol. 1, no. 1, 2005.
19. Carlo Bellieni ; M.D. The Best Age For Pregnancy and under pressures ; Vol .10 , No. 3 ,September 2016 ; DIO: <http://ifrh.tums.ac.ir>
20. Spandorfer SD, Bendikson K, Dragisic K Schattman G , Davis OK,Rosenwaks Z. Outcome of in vitro fertilization in women 45 years and older who use autologous oocytes fertiil steril 2007 ;87:74 - 6.
21. Nyboe Andersen A , Goossens V ,Bhattacharya S, Ferraretti AP, Kupka MS, de mouzon J , et al .Assisted reproductive technology and intrauterine inseminations in Europe ,2005:results generated from European registers by ESHRE :ESHRE .The European IVF monitoring programme (EIM), for the European society of human reproduction and Embrology (ESHRE ).Hum reprod 2009 : 24 : 1267 - 87 .
22. Gossett DR. Nayak s, Bhatt S, Bailey SC. What do healthy women know about the consequences of delayed child bearing? J Healthy commun 2013;18 Suppl 1:118-28.
23. American college of obstetricians and gynecologists committee on gynecologic practice committee. Female age related fertility declined. Committee opinion member 589. Fertile steril 2014;101:633-4.
- 24.E cosson, L carillon, P valensi. High fasting plasma glucose during early pregnancy: A review about early gestational diabetes mellitus. Journal of diabetes research. Vol.2017;8921712.

25.B E Metzger, S.G Gabbe, B. Persson *et al*,"International Association of diabetes and pregnancy study groups recommendations on the diagnosis and classification of hyperglycemia in pregnancy," *Diabetes care*, Vol.33,No.3, pp.676-682,2010.

26.Reeta Lampinen, Katri Vehvilanen-Julkinen, Paivi Kankkunen. A Review of pregnancy in women over 35 years of age. *The open nursing journal*, 2009,3, 33-38.

27.Carolan M. Nelson S. First mothering over 35 years: questioning the association of maternal age and pregnant risk. *Health care Women Int* 2007; 28 (6):534-55.

28.Maria Luiza Heilborn and Cristiane s. cabral. A New Look at Teenage pregnancy in Brazil. International scholarly Research Network ISNR *Obstetrics and Gynecology*, Vol 2011,Article ID 975234,7 Pages.

29.A.A. Camarano, "Fecundidade e anticoncepcao da populaacao jovem," in jovens Acontecendo na Trilha das politicas publicas, E.Berquo,Ed., vol.1, pp. 109-133, comissao Nacional detopulacao e Desenvolvimento, Brasilia, Brazil, 2006.

30.S.M. Cavenaghi, E. Berquo. "Increasing adolescent and youth fertility in brazil: A New trend or A onetime event?" in proceeding of the Annual meeting of the population association of America, pp.1-18, population association of America, Philadelphia, pa, USA, April 2005.

31.C.C.S. Simoes, A Transicao da Fecundidade no Brasil: Analise de seus Determinates e as Novas Questoes Demograficas, Albeit Factory sao Paulo, brazil, 2006.

32.Tracy stickler and jill seladi- schulmal: Pregnancy risk factors: Age: weight, preexisting conditions and more. *Health line*.

33.What are some factors that make a pregnancy high risk? NIH <https://www.nichd.nih.gov/health/topics/highrisk/condition.info>.

34.Managing a high risk pregnancy PubMed. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1000000/>

35.Hannah Nichols: Pregnancy after 35years: what are the risks? *Medical news today*: 2017.

36.Tracy Stickler, Jill Seladi-Schulman Health risk associated with pregnancy: *Health line*.2018.American college of obstetricians and gynecologists (2018). FAQ-103: having a baby (especially for teens). <https://www.acog.org/Patients/FAQs/Having-a-Baby--Especially-for-Teens?IsMobileSet=false>.

37.Kathleen Rudd Scharf: teenage pregnancy: why the epidemic? *Pediatrics* Vol.64 No. 3, 1979.

38.Volling, Brenda L. "Family transitions following the birth of a sibling: an empirical review of changes in the firstborn's adjustment." *Psychological bulletin* vol. 138,3 (2012): 497-528. doi:10.1037/a0026921.

39.Gill, S.K. Broussard, C. Devine, O. Green, R.F. Rasmussen, S.A. Reehuis, J., Association between maternal age and birth defects of unknown etiology: United states, birth defect research.(2012).

40.Grande M, Borrell A, Garcia-posada-R, Borobiv V, muatoz M., The effect of maternal age on chromosomal anomaly rate and spectrum in recurrent miscarriage .2017.

41.Sivalingam V.N,Duncan W.C,Kirk E,shepherd L.A,Horne A.W., Diagnosis and management of ectopic pregnancy. *General of family planning and repr*

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