Abstract
The number of babies born to women in their late 30s has progressively increased over the past decade. The published data on the risks associated with childbirth at >35 years are inconsistent. It is known that older women are more likely to have pre-existing medical disorders such as diabetes mellitus or hypertension. Some studies have demonstrated an increased incidence of antepartum haemorrhage, malpresentation, operative vaginal delivery, Caesarean delivery, and fetal death. Advanced maternal age is also postulated as an independent risk factor for low birthweight, preterm delivery, placenta praevia, and infants being admitted to the special care baby unit. There is no evidence that women aged >35 years with a post-term pregnancy have an increased risk of antepartum fetal compromise but their babies do not tolerate labour as well as those of younger women, with more decelerative traces and more Caesarean sections. In contrast, other papers report little or no adverse outcomes associated with pregnancy in older women. Pregnancy in older women is associated with many confounding factors e.g. parity, pre-existing diabetes mellitus and/or hypertension, which should be taken into account if the risks associated with advanced maternal age are to be quantified.

Keywords: LATE AGE PREGNANCY; NO LONGER; DISTANT DREAM

1. INTRODUCTION

“We have enjoined on man kindness to his parents: In pain did his mother bear him, and in pain did she give him birth.” [Holy Quran: Surah Ahqaf: 46:15]

Pregnancy is a proud moment for every woman. And every woman dreams of going through this painful yet fruitful experience. Childbirth is one of the most emotional moments in a woman’s life.

Older moms, even really old moms, pushing strollers, wiping babies' noses, are a common sight these days. Not so long ago, women over 30 were regarded as high-risk older mothers, and strictly in the medical sense, they still are. But today the 30-year-olds are often the "younger mothers" at the preschool picnic. Birth control, delayed nesting among career-oriented baby boomers, lenient adoption guidelines, and advances in fertility treatments have worked together to create a rising tide of first-time parents who are in their 40s and beyond.
A healthy live birth is a very strong indicator of health status of a woman in a given society. A successful late age pregnancy comes along as a package of health, wealth and luck. Even among healthy older women, late age pregnancy can bring along various complications. It is important for the pregnant women in particular and family members in general that the health of pregnant women should be dealt with seriously, considering prenatal and post natal care as the necessary elements.

Problem Statement:
Late age pregnancy has gained momentum during the past decade. It is important for the common men and women to understand all aspects of late age pregnancy, if they plan on giving birth at a later stage in life. The knowledgability of older pregnant women concerning pregnancy-related issues has not been the focus of many studies. Therefore, the researcher wants to cover all important aspects of late age pregnancy within this article, not only to be of medical help but also provide social benefit to the society. In this study the researcher wants to know:

What is late age pregnancy?
What is the difference between old age pregnancy and infertility?
What are the advance treatments available throughout the world?
What are the merits and demerits of late age pregnancy?
What are the challenges of late age pregnancy faced by women in Pakistan?

Background Study:
Older mothers have frequently been criticized for putting their desire to be a parent before the child’s welfare. Pregnancy in older women is of great relevance, particularly in developed countries where many women experience pregnancy late in the childbearing age and beyond.
In the past, an older mother often meant a woman who already had a large family and was having her fifth, sixth or the seventh baby. Having many pregnancies often leads to complications. Now an older mother usually means someone who has chosen to start her family late and is often fitted and well nourished.

Being well prepared for pregnancy seemed to be a characteristic more typical of older pregnant women. Being considered ‘at risk’ causes women’s anxiety, which they try to ease, by preparing themselves for pregnancy and seeking information. Lampenin stated that Carolan in 2007 studies that women aged over 35 years approached pregnancy as a project which should be preceded by a stage of careful planning. These women described their main health concerns as a likelihood of fetal genetic problems or maternal complications during pregnancy e.g. gestational diabetes, postpartum depression, multiple births or miscarriages (Lampenin et. all:2009:33-38).

Prior to conception older women also prepare themselves for pregnancy both physically and mentally. Such preparations often meant losing weight, going on diets and taking exercise. Some women visited specialist doctors to discuss existing health issues. Choosing hospitals and birth care options was another way in which the women prepare for pregnancy. And being aware of the increased risks associated with their age, the
especially valued the availability of emergency services at the hospital. Having become pregnant, women adopted a different range of health promoting activities in response to their concerns and needs in relation to their pregnancy. These activities included following a healthy lifestyle and taking special care of their nutritional status.

Several case studies have been conducted regarding late age pregnancy e.g. Maria Del Carmen Bousada de Lara is the oldest verified mother; she was aged 66 years 358 days when she gave birth to twins; she was 130 days older than Adriana Iliescu, who gave birth in 2005 to a baby girl. The children were conceived through IVF with donor eggs. The oldest verified mother to conceive naturally (listed currently in the Guinness Records) is Dawn Brooke (UK); she gave birth to a son at the age of 59 years in 1997. (Wikipedia:2012:http://en.wikipedia.org/wiki/Pregnancy_over_age_50)

Research Objectives:
To explain the late age pregnancy.
To determine the difference between old age pregnancy and infertility.
To explore the advance treatments available throughout the world.
To determine the merits and demerits of late age pregnancy.
To find out the challenges of late age pregnancy faced by women in Pakistan.

Research Methodology:
The research being carried out is a form of exploratory research. Exploratory research is a type of research conducted for a problem that has not been clearly defined. Exploratory research helps determine the best research design, data collection method and selection of subjects (Wikipedia:2013:http://en.wikipedia.org/wiki/Exploratory_research).

Exploratory research often relies on secondary research such as reviewing available literature and/or data, or qualitative approaches. In this case the secondary data is extracted from the annually published medical surveys, reports, International Journals, books, newspaper articles, talk-shows, online discussion forums, private publications, Internet web sites and different libraries. The Internet allows for research methods that are more interactive in nature. This methodology is also at times referred to as a grounded theory approach to qualitative research, and is an attempt to unearth a theory from the data itself rather than from a predisposed hypothesis. (Wikipedia:2013:http://en.wikipedia.org/wiki/Exploratory_research)

2. RELATED THEORIES
Maslow's hierarchy of needs
Christopher D. Green in August 2000 republished the ‘The theory of Human Motivation’ in his paper ‘Classics in the history of psychology’. Abraham Maslow's hierarchy of needs, famously known as: ‘A Theory of Human Motivation’ was developed in 1943 and was originally published in the paper Psychological Review. Maslow’s hierarchy of Need can be of great help in understanding late age pregnancy and how the problems arising during the reproductive process could be dealt with.
Relating the Maslow’s hierarchy to our research, it can be explained that the above mentioned needs are the basic requirements of every individual including a pregnant woman. A pregnant women, young or old, needs comfort and safety. Basic needs starts from physiological needs, which include breathing, food, water, sex, sleep, and excretion. Then comes the security for the pregnant women and that means the security of her body, her employment, her resources, her mortality, her family, her health and her property. After the first 2 needs being satisfied for a pregnant woman, then comes in friendship, care and love of her family. After achieving the first 3 levels, the pregnant lady then seeks for self esteem, confidence and respect by and for others. This not only will make her happy but will also bring in positive effects on the baby’s health. Self-actualization, if achieved by the pregnant women, helps her flourish as strong women in the society (Maslow:1943:http://psychclassics.yorku.ca/Maslow/motivation.htm).

All these factors need to be satisfied in order to make pregnancy and the birth a normal process and proud moment for expecting mothers. And if the pregnancy is a late one, then special care should be taken at every step for the older pregnant woman.

Cronenwett’s conceptual framework depicting 4 kinds of social support Robert Attorri in 2007 stated in his North Carolina Medical Journal the Linda Cronenwett’s conceptual framework depicting 4 kinds of social support namely, emotional, material, information and compassion support. It was presented in 1985. All the supports can help to enhance the quality of the social support and social network for pregnant women. This kind of quality of social support can play an important role especially in motivating late aged pregnant women towards positive behavior to seek medical help (Attorri:2007:68).

The qualities of the social support and social network for pregnant women influence their mental and physical states during pregnancy and childcare period. As for support resources, pregnant women’s family, friends and husband’s family provide most of the social support for pregnant women. Among them, husband, mother, sisters and husband’s mother are especially important members, providing satisfactory support for pregnant women. The pregnant women’s and her husband’s families are the resources of emotional
and material support. Friends are there for providing information and compassion support. This support also includes religious aspects, i.e. the confidence in ALLAH and seeking help through prayers. This support can positively enhance her confidence in herself to undergo all the intricacies of pregnancy. If the food, material and emotional support are of good quality, they will make her pregnancy period much easier and comfortable (Attorri:2007:68).

3. LATE AGE PREGNANCY

Late age pregnancy has become possible due to recent advancements in science and technology. The progress in assisted reproductive technology gave rise to processes such as egg donation.

A woman’s fecundity ends with menopause. That is twelve consecutive months without having had a period. Peri menopause usually begins between age 40 and 51. This is when the periods become irregular and eventually stops altogether. Man in contrast generally remains fertile throughout their lives. Although the risk of genetic defects is directly proportional to the maternal age effect, therefore the late age pregnancy is associated with increased risk. The high risk factor makes the late age pregnancy a subject of controversy and debate. Pregnancy after 50 isn’t something that should be considered undertaking voluntarily. It can be very tempting to do so at times when the celebrities are witnessed having babies at that age (Wikipedia:2012:http://en.wikipedia.org/wiki/Pregnancy_over_age_50).

For the average women, the late age pregnancy is not common and it is usually not recommended. In fact, it will give the pregnant woman a hard time finding a doctor to assist her in having a child at late age.

Nowadays, doctors do not see any medical reasons to deny having an old age pregnancy. More and more women, even after 50 are using the technological ladder to climb the stairs of pregnancy.

If human beings were like other animals, they wouldn’t be facing this problem and would simply go on producing babies until they died. They are the only species where the female has a menopause.

Late age and Infertility

Fertility starts to decline for women from about the age of 30, dropping down more steeply from the age of 35. As women grow older the likelihood of getting pregnant falls while the likelihood of infertility rises.

Most women will be able to conceive naturally and give birth to a healthy baby if they get pregnant at 35. After 35 the proportion of women who experience infertility, miscarriage or a problem with their baby, increases. By the age of 40 only two in five of those who wish to have a baby will be able to do so.

From a purely biological perspective, it’s best to try to start a family before you're 35.

The chart below shows the chances of getting pregnant according to age. The chart is only a guide. It shows average figures for women in the best of health.
The chart above shows results of healthy pregnant women. It indicates that if the pregnant women is aged between 20 and 24 years of age, the likelihood of infertility is very low that is only 3 percent and the chances of conceiving is 86 percent. Between the age 25 and 29, the chances of infertility rises a little that is reaches 5 percent while the likelihood of conceiving drops to 78 percent. Going higher and the reaching the age between 30 and 34, the likelihood of the likelihood of infertility rises to 8 percent while the chances of getting pregnant drops to 63 percent. Between 35 and 39 years of age the infertility rate rises to 15 percent and the getting pregnant rate falls below 52 percent. It is the age between 40 and 44 years when the rate of infertility and the rate of getting pregnant are almost equal that is 32 percent and 36 percent respectively. Beyond this when the woman reaches 45 to 49 years of age the likelihood of infertility increases to 69 percent while the likelihood of conceiving decreases to 5 percent. Still going further when the woman is 50 years and plus that is she has reached her menopause, the chances of infertility reaches the highest levels that is 100 percent while the chances of getting pregnant drops to absolute zero percent.

There is another important point to consider if a woman is trying for a baby when she is over 35 years of age. She has a higher chance of having a multiple pregnancy. She may be delighted at the prospect of conceiving twins. For some women having a multiple pregnancy brings them their dream family in one pregnancy. But it is also worth bearing in mind that caring for twins is more demanding of time, emotions and finances than caring for one baby. The pregnant woman may also need extra care during a multiple pregnancy. (Chen:2008:http://www.umm.edu/pregnancy/000201.htm)
Advance treatments in different parts of the world which has given rise to late pregnancies
A study was conducted during 1991-1999 in the University of Southern California Keck School of medicine by Richard J. Paulson, where women of middle age (50 to 63) were out through the throes of pregnancy out of which about 40 percent were able to delivery healthy babies. These women, who were post menopausal, were planted with eggs with the help of in vitro fertilization. This proves that there are two parts to the reproductive capacity of a woman. Firstly, we consider that a woman remains fertile as long as her ovaries produce eggs. After infertility, which occurs after the menopause, she can still get pregnant with artificial insemination as the rest of the reproductive system of the women still remains intact. In the second stage of this process, a woman will require the hormones estrogen and progesterone, as their natural production is reduced with the advent of old age and after menopause (Paulson et. all:1991-1999:http://keck.usc.edu/en/Education/Academic_Department_and_Divisions/Departments/Department_of_Obstetrics_and_Gynecology/Divisions/Reproductive_Endocrinology/Research.aspx).

In another study, scientists at Newcastle University’s institute for aging and health, led by Doctor Mary Herbert, a reproductive biology expert, identified why some older women produce abnormal eggs. Their findings were published in the journal of current biology. Cohesion, the protein which they also found in mouse eggs declines with aging. They theorized that this protein, which keeps chromosomes together, causes abnormal splitting of the chromosomal material when it is in lower levels. This finding could potentially lead to treatment which might help maintain fertility in older women (Campbell:2010:http://www.guardian.co.uk/science/2010/sep/02/fertility-study-mice-eggs-older-mothers).

United Kingdom’s pregnancy clinics are now routinely treating older women. New data from the office for National statistics show that in 2009, 10 percent women, aged 50 and over, had babies; this has 55 percent increased over the previous years (Medvacation:node:
http://www.themedvacation.com/overseas_fertility Clinics_for_over_older_women_40_50). In the United Kingdom, 635 women in 1999 were over 50 when they gave birth, this figure increased to 1619 women in 2009. One in five births in the United Kingdom in 2009 was to women over 35, almost half of all the births to women over 30 (Wikipedia:2013:http://en.wikipedia.org/wiki/Pregnancy_over_age_50).

According to statistics from the Human Fertilization and Embryology Authority, in the Britain, more than 20 babies are born to women over age 50 per year through in-vitro fertilization with the use of donor oocytes (eggs) (Wikipedia:2013:http://en.wikipedia.org/wiki/Pregnancy_over_age_50).

Simon Thornton, a medical director of care fertility, notes that: “More women are now coming forward for treatment in their late forties and early fifties due to the increase in general fitness. Many women do look after themselves extremely well. Fifty now doesn’t seem like what 50 was.” (Medvacation:node
Governments have sometimes taken actions to regulate or restrict later-in-life childbearing. In the 1990s, France approved a bill which prohibited postmenopausal pregnancy, which the French Minister of Health at the time, Philippe Douste-Blazy, said was "...immoral as well as dangerous to the health of mother and child". In Italy, the Association of Medical Practitioners and Dentists prevented its members from providing women aged 50 and over with fertility treatment. Britain's then-Secretary of State for Health, Virginia Bottomley, stated, "Women do not have the right to have a child; the child has a right to a suitable home". However, in 2005, age restrictions on IVF in the United Kingdom were officially withdrawn. (Wikipedia:2013:http://en.wikipedia.org/wiki/Pregnancy_over_age_50)

Legal restrictions are only one of the barriers confronting women seeking IVF, as many fertility clinics and hospitals set age limits of their own. Even in the United States, between 1997 and 1999, 539 births were reported among mothers over age 50, with 194 being over 55.

Top IVF centre in UAE Dubai is founded by Micheal Fakih, who is responsible for over 10,000 IVF deliveries. His continuous innovations of new techniques have made him pioneer in this field. Fakih IVF is one of the leading fertility clinics in the world, providing a wide range of infertility treatments. (Zawya:2012:http://www.zawya.com/story/Infertility_treatment_breakthroughs_presented_In_Dubai-ZAWYA20121017113236/)

A survey of attitudes towards pregnancy over age 50 among Australians found the 54.6% believed it was acceptable for a postmenopausal woman to have her own eggs transferred and that 37.9% believed it was acceptable for a postmenopausal women to receive donated ova or embryos. (Wikipedia:2013:http://en.wikipedia.org/wiki/Pregnancy_over_age_50)

In Finland, in 1997, 8.3% of primigravida women were over 35 years old. In 2007, this has increased to 10.4% (Lampinen, Vehvilainen-Julkunen, Kankkunen:2009:33-38).

In Sweden, in 1997, 10% primigravida women were over 35 years of age. In 2007, this has increased to 19. 2% (Lampinen, Vehvilainen-Julkunen, Kankkunen:2009:33-38).

Prof. Dr. Zahida Baqai is the pioneer in the field of IVF (INVITRO FERTILIZATION) in Pakistan. She established Baqai Institute of Reproductive & Developmental Sciences (B.I.R.D.S.). This is a specialized technology for the treatment of infertility. About 13% of married couples do not have babies normally and they need very specialized technique for the treatment. In laymen language it is known as (Test Tube Baby Centre). This institute is at number SIX (6) in the world as for as its success in the field is concerned (Baqaians student forum:2011:http://www.baqaians.com/bforum/general-discussion/introduction-of-prof-dr-zahida-baqai/).
4. MERITS AND DEMERITS OF LATE PREGNANCY

Merits

- Earlier, late pregnancy was considered as undesirable, however with advancement in the medical sciences, and with the changes of internal clocks of the women, the fertility treatment is considered possible and safe.
- For the last 10 to 15 years the number of cases of late pregnancy has considerably increased and has given rise to following advantages.
- Older pregnant women are more health conscious.
- Aged mothers are usually more confident and emotionally developed to cope with the situation. They plan to contribute positively to society through example and birth of their child.
- Late aged pregnancy has proven inspirational for research.
- The fertility treatments carried out on older pregnant women is very useful, effective and safe.
- Respect for diversity and differences.
- It gives a chance to a woman who marries late, to opt for motherhood by donation of egg.
- A pregnant woman decides to conceive late because they want to complete their education first so that they can enjoy both marital life with children and professional life too.
- Couples want to maintain high status and therefore save more and thus are more interested in late marriages, late pregnancy and enjoy freedom of life.
- Women wanting to postpone motherhood or have fallen pregnant at a later stage in life have inspired innovative medical treatments and techniques.

Demerits

- From the medical point of view the safest time to have children is the earlier part of women’s reproductive life.
- Late pregnancy is an option where you will need health, wealth and luck because donor eggs are very expensive and risky too.
- Late pregnancy can result in unexpected pregnancy; women can also deteriorate health wise faster.
- As compared to healthy older mothers, healthy younger mothers have more energy to raise her baby.
- Older mothers loose independence due to delaying pregnancy for their career.
- There is a higher chance of having a baby with genetic abnormality in late age pregnancy.
Challenges faced by Pakistani late aged pregnant women

Basic information on the challenges faced by the Pakistani late aged pregnant women are taken from: (http://www.womenshealth.gov/pregnancy/you-are-pregnant/pregnancy-complications.cfm)

Pregnancy at an old age comes with high risk and therefore is at times accompanied with complications. Like in most cases of old age pregnancy in Pakistan; births can only take place with the help of caesarian operation as the body does not remain fit to go through the rigors of physical labor. (Wikipedia:2013:http://en.wikipedia.org/wiki/Pregnancy).

Moreover, in about 20 percent of cases in Pakistan, the women develop gestational diabetes, which means that they develop diabetes and blood pressure issues which are the direct result of such pregnancies. But this does not mean that these women will carry these ailments throughout their lives, with proper care they can lead healthy lives and remain fit as well.

Risk associated with child bearing at an old age includes preeclampsia and placenta previa as well. In comparison to mothers between 20 and 29 years of age, extremely low birth weight, small size for gestational age and fetal mortality was almost double.

Ectopic pregnancies and miscarriages are most common in older women than in the younger women. The sign of these two conditions include severe abdominal cramping, vaginal bleeding, fever and passage of pink grey matter from the vagina. These conditions may be life threatening and require emergency medical attention.

There are a few other issues connected with emotions that need to be taken care of. Medical Science has done its job well that women can now think of having an old age pregnancy. Moreover, remember that a lot of money will also be involved in old age pregnancy. Child birth and the donor eggs are costly affairs. The pregnant women will also need support at home for the entire nine months till the baby is growing inside the aging body.

In Pakistan, older mothers often worry that their age will affect their pregnancy, and the birth of the baby. Some women feel that extra tests and interventions should be introduced to them due to their age. This creates further problems for lower middle and lower class and increases their economic burden as well. As long as women are powerless financially, they cannot actively participate in self care and thus their health status cannot be improved.

A woman’s health is said to be at risk if she gives birth to a child too early, too late or too frequently. The socio-cultured norms in Pakistan expose women to all of these risks.

Health issues are most common among women who have had many pregnancies throughout adulthood. In these situations, pregnancy is possible and may even be viable. The key turning point occurs around the beginning of the second trimester. If the fetus
remains healthy through that stage, the pregnant woman will have a healthy bouncing baby.

In Pakistan, late pregnancy is not suitable as far as women health is concerned and the survival of the child, it is very risky, expensive and an unhealthy issue not just for the mother and the child but also for the family at large.

5. CONCLUSION AND RECOMMENDATIONS

Although having a baby at a later age may put you at higher risk for complications, the majority of older women have healthy babies. Late age pregnancies come along with higher miscarriage risks and with lower conceiving ability. Once you have educated yourself about the potential risks, you can turn your focus on all the things that go with a healthy pregnancy at any age. These include proper nutrition and diet, good prenatal care, and preparation both emotionally and financially for your baby and the care that will be needed.

There can be advantages too attached with have a baby at a late age. Older women and men often find that they are more patient and realistic in coping with the challenges of a new baby than they would have been earlier in life. Likewise, they may have a greater appreciation of the joys of parenthood. Having established their careers, they may feel like they have more time to devote to the baby. But a new responsibility can bring in a lot of discomfort in their otherwise peaceful daily routine.

The older pregnant woman needs to eat the right foods and should get plenty of rest that is recommended by the doctor. Infact, she needs to eat and rest more than the other younger and more energetic pregnant women. The doctor may provide additional instructions based on the personal health and history.

Proper prenatal and antenatal care should be provided to the pregnant women in order to ensure the well being of the mother and the child. Regular and more frequent visits to the doctor during late aged pregnancy can help in detecting any complication at a very early stage so that it can be easily dealt with.

The older pregnant women will be required to take additional vitamins and supplements especially calcium.

Though the infertility treatments are a costly procedure, but still they are worth the pleasure a child brings for the entire family.
REFERENCES

- Christopher D. Green, August 2000, republished the theory of Human Motivation, Classics in the history of psychology’, York University.
- Surah Ahqaf 46, ayah 15, Holy Quran
- Zev Williams, 12th January 2012, Pregnancy central- Special care pregnancies, Pennstate Hershey- Milton S. Hershey Medical Centre, Pennstate college of Medicine.

PUBLICATIONS

- Christopher D. Green, August 2000, republished the theory of Human Motivation, Classics in the history of psychology’, York University.


Zev Williams, 12th January 2012, Pregnancy central- Special care pregnancies, Pennstate Hershey- Milton S. Hershey Medical Centre, Pennstate college of Medicine.


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http://news.bbc.co.uk/2/hi/health/8152002.stm
Challenges from http://www.womenshealth.gov/pregnancy/you-are-pregnant/pregnancy-complications.cfm

University of Maryland Medical centre, http://www.umm.edu/pregnancy/000201.htm
http://psychclassics.yorku.ca/Maslow/motivation.htm
Chart from http://www.babycentre.co.uk/a6155/your-age-and-fertility