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Influence of Life Style Changes on Fertility Causes and Concerns

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Abstract

Infertility is a global concern for couple. After globalization, the problem of infertility is becoming more relevant, due to lifestyle changes. Life style has a serious impact on fertility in both men and women. Life style changes includes late marriage, delayed reproduction, career aspirations, eating habits, intoxication habit, high level of stress, etc.. These lifestyle changes result in to obesity, hormonal disturbance, low sperm count, less egg production, disease, depression etc., which significantly affects reproductive health. Lifestyle changes also effect reproductive treatment. This research paper explores infertility as a consequence of lifestyle changes focusing on shift in societal norms, values, ideological changes, gender roles and living pattern. This research paper is based on review which analyzes the complex interplay of life style changes and its impact on fertility.

Keyword: Globalization, living pattern, delayed reproduction, gender roles and reproductive treatment.

INTRODUCTION

Infertility is a growing concern worldwide, after globalization. Lifestyle changes significantly contributing to its increasing prevalence. Infertility has a various factors depending on changing lifestyle i.e. alcoholism, smoking, unhealthy diet, late marriage, delayed reproduction, stress etc. These lifestyle changes affect both men and women's fertility. Excessive smoking or drinking alcohol would damage the reproductive capacity of the men leading to difficulty in conception, even if they subsequently stop consuming liquor. Other life style factors such as exposure to harmful chemicals in the work place and eating spicy and oily food were also mentioned as important reason for childlessness (Pujari S. and Unisa S., 2014). Infertility is a disease of the male or female reproductive system defined by the failure to achieve a pregnancy after 12 month or more of regular unprotected sexual intercourse. Infertility can be categorized as primary or secondary for women. Primary infertility refers to the inability to achieve a pregnancy, while secondary infertility occurs when a person has previously had at least one pregnancy, but is unable to conceive again. Infertility can result from various factors in both male and female reproductive system. In males infertility may be caused by absent or low sperm count, hormonal imbalance involving low level of testosterone, low level of follicle stimulating hormone (FSH), thyroid stimulating hormone (TSH) imbalance, luteinizing hormone (LH) imbalance, problem in semen ejaculation and other reproductive disorders. In female infertility may arise due to abnormalities in ovaries, blocked fallopian tubes, Polycystic ovary syndrome (PCOS), Polycystic ovarian disease(PCOD), endometriosis, hormonal imbalance such as, low level of Anti-Mullerian hormone (AMH), low level of follicle -stimulating hormones (FSH), thyroid stimulating hormone (TSH)

imbalance, ovulation problem etc. After globalization, the growing emphasis on education, career aspirations and financial self- reliance among male and female both leads to significant life style changes. Now earning is more important than health. These lifestyle changes contribute to problem of hormonal imbalance, reduced sperm count or quality and irregular ovulation all of which results into infertility. These lifestyle changes also impact medical treatment of infertile couples. There are reports of deteriorating reproductive health indices since the last 5-6 decades ago from different parts of the world especially in industrialized/developed countries as a result of modifiable lifestyle factors (Kumar *et al*., 2018). This review aims to highlight the adverse impacts of certain lifestyle changes on reproductive system of both male and female.

Objective

Objective of this research paper is to highlight the adverse impact of lifestyle changes on male and female reproductive system. Lifestyle changes involves women in workforce, late marriage, delayed reproduction, unhealthy diet, alcohol consumption, smoking, drug abuse, use of electromagnetic radio frequency, sleep pattern, physical activity, anxiety and depression etc. which increases the problem of infertility. The aim of this research paper is to explore how modern infertility treatments, such as IVF, IUI etc. are failing due to lifestyle changes.

Methodology

This research paper is based on review of literature. This review is focused on impact of life style changes on infertility. Life style changes include late marriage, delayed reproduction, unhealthy living pattern, anxiety etc. This review synthesized studies related to infertility from reputable database including JSTOR, PubMed, Research gate etc. and field view. Articles were examined to evaluate relationship between lifestyle changes, infertility and medical treatment

Changing social perspective

Globalization significantly affected social perspective, societal norms and gender roles. As more people prioritizing education, career- aspiration, and financial self- reliance traditional expectations such as marriage, family, procreation existence are suffering. The society is facing changes in the following social perspectives:

Higher education and financial self- reliance of women

In patriarchal society, gender roles are culturally constructed, where men expected to work outside and women expected to give birth and socialize their ones. After globalization and change in lifestyle of people, there is change in gender roles of male and females. Liberal feminism suggest for equal rights for men and women. It also highlights women should financially independent in recent decades women pursuing higher education and participation in the works force as economic opportunity increases for women a broader range of career, lifestyle become available to them (Forsyth,1999). Educational feel along with occupational characteristics play an important role in shaping women reproductive behavior (Bagvos, 2010). The intersection of financial independence, higher education, and reproductive health is a growing concern, particularly in countries experiencing declining birth rates (Mills et al., 2011). Many industries offer limited support for working mothers, forcing women to choose between career progression and motherhood. The stress of balancing financial independence and family

responsibilities can lead to hormonal imbalances, affecting fertility (Vahratian, 2008). Working women have a high rate of infertility which must be primary due to a stressful work environment which significantly impact the menstrual cycle (Bajeli-Datt, 2023). Assisted reproductive technologies (ART) are not affective for working women. Infertility treatment requires proper time, rest and care.

Late marriage and delayed reproduction

Since globalization, the significance of education, career aspirations, and financial self-reliance has expanded considerably, which transforming societal norms leading to late marriage and delayed reproduction. Now procreation is no longer the primary objective of a woman's life. But there is biological constraint on reproductive health. Biological constraints on fertility mean that delayed reproduction increases the risk of infertility. Age plays a vital role in procreation. Age is the critical factors in infertility and is particularly relevant factors for women. Peak reproductive age is between 19 and 25 year and fertility drops significantly after the mid 30's (Singh and Shukla, 2015). Aging is associated with degenerative changes at the levels of all organs and system, and as such fertility may be affected (Balasch and Gustavo's, 2011). Aging effects both male and female reproductive system. Aging in men leads to decrease in semen volume and motility, reduce blood supply to the testes, decline in sperm quality and quantity. Delay in starting a family or aging among men may lead to the production of poor quality spermatozoa. Semen parameters begin a steady decline as early as age 35 (Stone et al., 2013). Aging also effects women ovulatory system. Nature has given women a limited number of eggs, which decreases in quality and quantity by the age of 35. Due to late marriage and delayed reproduction, when they plan for pregnancy, the quality of woman's eggs has already deteriorated and eggs remain low, leading to problems in conceiving, which results into infertility. When pregnancy is delayed there is a societal pressure also to conceive, it also leads to stress which affect fertility.

In contemporary society many couple did not want to take the responsibility of child immediately after marriage due to prevalence of pleasure driven lifestyle. Pleasure driven lifestyle is similar to Giddens concept of 'Plastic sexuality'. Plastic sexuality is a decentered sexuality: freed from the needs of reproduction. Sex is no longer directly tied to having children. People are choosing cohabitation over immediate family formation (Giddens, 1992). That is the reason they delayed pregnancy. For delaying pregnancy many couple uses oral contraceptives. Educated women have better access to contraception and family planning tools, leading to postponed childbearing (Rindfuss et al., 1996). While contraception prevents unintended pregnancies, prolonged use without timely planning can result in infertility (Mills et al., 2011). After so much precaution if unplanned pregnancy occurs, then they do abortion for fulfilling their career aspiration and pleasure driven life style. Recurrent abortion can lead to sexually transmitted diseases (STI). Recurrent abortion can also cause fertility issues that is hormonal imbalance, block fallopian tube which create problem in conceiving, when they want to get pregnant. These reproductive problems may lead to infertility. Sometimes pregnancy is so delayed that even medical treatment (ART) is not helpful for reproduction.

Changing living pattern

Globalization has significantly altered living pattern, particularly in developing countries like India. These changing patterns may include unhealthy diet, smoking and alcoholism or drug abuse, excess use of Electromagnetic radiofrequency (mobile phone/computers), caffeine consumption, late night sleeping, unhealthy physical activities etc. Some authors suggested that adverse lifestyle factors such as smoking,

alcohol consumption, and caffeine can have an additive effect on fertility (Ilacqua *et al*., 2018). The reproductive system is extremely sensitive. It effects from the changing living pattern. Changing living patterns are as following:

Unhealthy diet

Since globalization with the increasing prevalence of career aspirations and economic self-reliance people have only importance of money not health that's why under nutrition, malnutrition and obesity caused by unhealthy diets have become major issues in developing countries. Unhealthy eating habits are overeating, skipping meals, late night eating, eating fast food or high fat diet, package or processed food and frozen food which are full of preservative, consumption of unsaturated fat. These unhealthy eating habits results in to obesity and lack of nutrition. Obesity is becoming a major health problem in contemporary society. In an effort to reduce obesity, especially women prefer intermittent fasting, which can lead to nutrient deficiencies in the body. In some cases, the preponderant of cheap high-calorie but nutrient-poor foods in the last four decades has contributed to the high prevalence of obesity all over the world (Giahi *et al*., 2016). High-fat diets inhibit reproduction by affecting the physical and molecular structure of not only sperm cells but also the developing fetus and offspring (Rato *et al*., 2014). An unhealthy diet can lead to dysfunctional ovarian activity in women and reduced semen concentration in men. Increase production of estrogen by the fat cells and primary sex organs that occur in a state of high body fat is interpreted as birth control by the body, hence limiting the chances of conception (Wasiu *et al*., 2012).

After globalization the trend of body building is increasing day by day. Some bodybuilder intake protein supplements for bodybuilding. Excessive intake of protein supplement may affect overall health. These protein supplements contain phytoestrogens which can make estrogen can mimic estrogen in the body. High level of estrogen can disturb the hormonal balance, which may lead to problem of sperm production and fertility. These protein supplements may also contain harmful substances, such as heavy metals, pesticides and artificial additives, which can adversely impact sperm quality and fertility. Some studies suggest that high protein intake may increase oxidative stress in the body, which can have a negative impact on sperm quality (Shiraz, 2023).

Intoxication

After globalization the trend of intoxication is prevalent globally. There are different form of intoxication which effect reproductive health of male and female both they are following:

- **Alcohol consumption**

In traditional society, alcohol consumption is primarily associated with men and considers it deviant behavior. After globalization alcohol consumption is widely used for recreation and relaxation by male and female both. In contemporary Indian society, women are financially independent and exposed to the outside world, hence some women also engage in alcohol consumption. In post modern society, college students are also involved in alcohol consumption for party and enjoyment. An estimated 400 million people, or 7% of the world's population aged 15 years and older, lived with alcohol use disorders. Of this, 209 million people (3.7% of the adult world population) lived with alcohol dependence (WHO, 2024). Excess consumption of alcohol is harmful for health. Besides damaging body organs such as liver, heart, nervous system, it also affects the reproductive system of male and female. Alcohol reduces many necessary nutrients from the body like vitamins, magnesium, zinc, iron etc., which is important for

proper functioning of reproductive system. Excessive alcohol consumption can lead to high blood pressure, hypertension, anxiety and depression, which is very harmful for reproductive system. Alcohol can reduce testosterone, gonadotropin release, and testicular atrophy, quality of semen, sperm count and motility in male reproductive system. It can also cause erection and ejaculation problems. Damage to the nervous system in men can results in sexual impotence due to loss of libido and erection (Durairajanayagam, 2018). Furthermore, it has been well documented that alcohol abuse and acute intoxication are associated with sexual dysfunction, including issues with arousal and desire, as well as erectile and ejaculatory dysfunction, all of which could lead to difficulties conceiving if men are unable to have effective intercourse (Grover, *et.al*, 2014). Excess alcohol consumption can significantly disrupt the balance of female fertility hormone level primarily Anti-Mullerian hormone (AMH), follicle - stimulating hormones (FSH) and luteinizing hormone (LH) level. It also lowers progesterone level. It increases estrogen and testosterone level. These hormonal shifts could result in abnormal folliculogenesis and impaired endometrial receptivity (Heertum and Rossi, 2017). It effects menstrual cycle of female which can lead to menopause at an earlier age in women. Heavy alcohol use may diminish ovarian reserve and fecund ability in women (Heertum and Rossi, 2017). Alcohol consumption may affect modern reproductive treatment outcomes. There is substantial evidence that alcohol use even in moderate quantities negatively affects assisted reproductive technology (ART) outcomes (Rooney and Domar, 2014). Those women who do undergo art should be advised to minimize their alcohol consumption prior to initiating treatment as even moderate amount of alcohol may decrease their chances of a successful life birth (Heertum and Rossi, 2017).

- **Smoking**

In traditional societies, smoking was predominantly practiced by men, whereas in postmodern societies, women also engage in smoking. Cigarette smoking among women has become more prevalent globally in recent time raising concern about public health (Jafari, *et al*, 2021). Smoking has an adverse affect on the human body organs like lungs, liver, kidney, heart etc. as well as a serious effect on the reproductive system of male and female. Tobacco smoke contains several substances such as nicotine, cadmium, lead, superoxide, and hydroxyl radicals that can adversely affect reproductive health (Emokpae and Brown, 2020).The harmful component in cigarettes lowers the levels of progesterone and estrogens, the female hormones. Consequently, there are fewer mature eggs available for fertilization. It can also destroy and decrease the quantity of eggs in the ovaries (Dhaga, *et al*, 2024). Smoking in women significantly reduces the chances of pregnancy impairing ovarian function and reducing its reserves. Smoking severely affects menstrual cycle, ovarian steroidogenesis, uterine receptivity, implantation in female reproductive system. Research has shown that women's ovarian reserve can decreased by 20% as the result of smoking cigarettes (Cui and Wang, 2024) It also effect developing follicle and reduces level of AMH. Smoking can also cause ectopic pregnancy. When a fertilized egg fails to reach the womb and begins to grow outside of the womb, is called ectopic pregnancy. Ectopic pregnancy results in death of the unborn child. Ectopic pregnancy can cause tube rupture, which may lead to infertility in female.

Cigarette smoking negatively affects reproductive system in men, including semen volume, sperm density, total sperm counts, sperm concentration and percentage of sperm with progressive motility. In addition to the effects of cigarette smoking on men semen parameters, exposure to cigarettes in utero may have an impact on a man's ultimate fertility in the future (Kovac *et al*., 2015). It has been discovered that passive smoking has the same unfavorable effects on implantation and pregnancy rates as active smoking (Neal *et.al*, 2005). Smoking may also impact the success of modern reproductive

treatments. Not only can smoking have unfavorable effects of male semen parameters, it may also reduce the success of assisted reproduction techniques, such as in vitro fertilization (IVF) and intracytoplasmic sperm injection (ICSI) (Kovac et al., 2015). Smokers require higher doses of gonadotropins for ovarian stimulation, leading to increased costs and lower success rates in fertility treatments (ASRM, 2018). Those, who are undergoing treatment by ART should quit smoking for successful conception.

Smokeless Tobacco consumption

Smokeless tobacco consumption is a most common form of intoxication. Tobacco is mostly consumed by both men and women of the lower class. In 2020, 22.3% of the world's population used tobacco: 36.7% of men and 7.8% of women (WHO, 2023). The prevalence of tobacco use is higher in the rural areas than in urban areas. Tobacco consumption is a significant public health concern with widespread consequences on fertility in both men and women. Tobacco use reduces testosterone levels and increases oxidative stress in the testicles, negatively affecting sperm production (Trummer et al., 2002). Tobacco thickens cervical mucus and blocks sperm from reaching the egg. Tobacco use in women has been shown to delay pregnancy by more than a year on average and cuts the chances of conceiving by more than half (Dr. Andrew Proulx, MD, 2020). Tobacco contains harmful chemical such as nicotine and cadmium which accelerate follicle depletion. Smoking is associated with a decline in ovarian reserve, leading to lower anti-Müllerian hormone (AMH) levels and an earlier onset of menopause (Freour et al., 2008). Tobacco consumption increases production of reactive oxygen species (ROS), which damages ovarian follicles, sperm DNA and endocrine disruption.

- **Drug Abuse**

Drug is generally used by sportsmen, body builder for increasing physical strength after globalization. It is also used by common people for enjoyment. Heroin and methadone are known to cause amenorrhea. Intravenous drug use exposes one to HIV and AIDS and also when someone is under the influence of such drugs that individual can partake in risky sexual acts that make him or her susceptible to sexually transmitted infections (STI), including Human Papilloma Virus (HPV) (Emokpae and Brown, 2021).Use of drug can cause permanent problem with reproductive system and infertility in both male and female because some drugs directly affect sperm or eggs and reduce fertility. Drug can affect production of male sex hormone I.e. testosterone which adversely affects sperm production. Drug abuse can also cause erectile dysfunction, ejaculation disorders, retrograde ejaculation and sexual dysfunction. Using anabolic steroids for bodybuilding or competitive sports can lead to testicular shrinkages and stop the production of sperm. Another important point is the frequency of bodybuilders taking testosterone supplementation therapy/anabolic steroids, being unaware of its negative impact on fertility, and presenting with azoospermia/ severe oligozoospermia in infertility clinics (Wenker *et al*., 2015). When a drug interferes with the endocrine function of the testes by altering Leydig cells or disrupts the hormone regulation system (at the level of the hypothalamic–pituitary axis), the resulting drop in testosterone can also impact spermatozoa production (Semet *et al*., 2017). Drug abuse affects hormonal production, menstrual cycle, ovulation in women. Drug abuse can also lead to weight loss, poor nutrition, sleep disruption and general physical deconditioning. Each of these adverse effects can interrupt menstrual cycles and ovulation. Drug abuse can also cause oxidative stress. Oxidative stress is an imbalance between production and accumulation of reactive oxygen species (ROS) and concentration of antioxidant that is lead to cell damage. Oxidative stress affects fertility in both male and female. It can decrease sperm

motility, impaired DNA integrity and damage reproductive cells in males. It can affect quality of eggs, the implantation of embryo in female. These hormonal changes lead to infertility.

Work environment

The work environment plays a significant role in reproductive health, influencing fertility outcomes in both men and women. Several studies suggest that prolonged exposure to harmful substances, stressful work conditions, and irregular work patterns contribute to declining fertility rates (American Journal of Industrial Medicine, 2023). In men, exposure to toxins can lower sperm count and quality, while in women; it may affect egg quality and menstrual cycles. Women with irregular work hours may experience menstrual irregularities and ovulation problems. Night shifts and irregular work schedules can disrupt circadian rhythms can lead to menstrual irregularities in women and reduced testosterone levels in men. Workers in semiconductor manufacturing have faced increased risks of miscarriages and birth defects due to exposure to chemicals like ethylene glycol ethers. Everyday chemicals found in plastic packaging, cosmetics, and industrial processes can interfere with hormonal functions essential for reproduction. Research indicates that chemicals like PFAS and BPA are linked to reduced fertility and hormonal disruptions (The Wall Street Journal, 2024). Certain chemicals, such as pesticides, heavy metals (lead, mercury), solvents, and radiation, can disrupt hormonal balance and reduce fertility. Jobs involving radiation exposure (e.g., radiology, nuclear industry) can damage reproductive cells.

Excess use of electromagnetic radio-frequency

Electromagnetic Radio frequency (EMR) is a type of microwave radiation emitted by mobile phones, computers, laptops, Wi-Fi routers and other wireless devices. Since globalization, exposure to electromagnetic radiation has increased in our daily life due to the expansion of mobile telecommunications services and internet services. Today, almost everyone owns a mobile phone which emits high level of radiation. This electromagnetic radiation negatively impacts human health particularly affecting the reproductive health of both men and women. EMR exposure may disrupt endocrine function leading to hormonal disturbance, such as estrogen and progesterone, which can result in menstrual irregularities, and ovulation disorders. Electromagnetic radio frequency generated by laptops, computers internal electronics circuit and Wi-Fi radiation negatively affect menstrual cycle, ovarian reserve, and embryo development in women. Electromagnetic Radio frequency affects semen concentration, sperm quality, sperm count, sperm motility, morphology and viability. Mobile radiation causes significant increase in reactive oxygen species (ROS) production. ROS are chemical molecules produced by cells as a normal product of cellular metabolism. ROS production causes oxidative stress, which affect semen parameters, sperm motility and viability. The fact that many men carry their cell phones in a trouser pocket (or clipped to their belts at the waist) while using Bluetooth can make them more prone to the RF-EMW exposure and can cause changes in semen parameters through oxidative stress and may lead to infertility (Veerachari and Vasampayan, 2012). Use of laptop on lap may also affect Male reproductive health. When it is placed on lap heat from a laptop can warm men's scrotums. Substantial evidence indicates that elevated scrotal temperature might be linked to male infertility (Mortazavi, *et.al*, 2016). Women undergoing assisted reproductive technologies (ART) like in vitro fertilization (IVF) may experience lower success rates if exposed to high levels of electromagnetic radiation.

Sleep pattern

In post modern society, people have irregular sleep pattern because of late night parties, late night use of mobile phones for entertainment, demand of job, need of career aspirations, which leads to sleep deprivation. Sleep deprivation is a total lack of sleep or shortage of expected optimal sleep duration. We live in a sleep deprived society with several pieces of evidence showing average sleep duration of 6.8 hours daily against 9 hours observed as century ago and about 30% of adults now sleep for a period less than 6 hours for night (NCHS, 2005). Sleep deprivation may lead to many health problems, like stress, anxiety disorder, depression, hypertension etc., which may affect reproductive health of male and female. Sleep disturbances deregulate the level of steroid hormones in the body and this might lead to infertility among men and women (Lateef and Akintubosun, 2020). Irregular sleep pattern can reduce sperm count, motility and viability and also disturb testosterone level in men. Sleep deprivation disturb, pulsatile secretion of gonadotropin, hormonal balance, such as follicle stimulating hormone (FSH), thyroid stimulating hormone (TSH), luteinizing hormone (LH). It disturbs estrogen and progesterone level, menstrual cycle, ovulation in women. It also causes earlier menopause. High corticosteroid are implicated in several cases of infertility in men and women (Lateef and Akintubosun, 2020). Sleep deprivation may lead to oxidative stress, which result in a high level of corticosteroid in the blood. These biological changes may cause problem in conceiving, which leads to infertility.

Physical activity

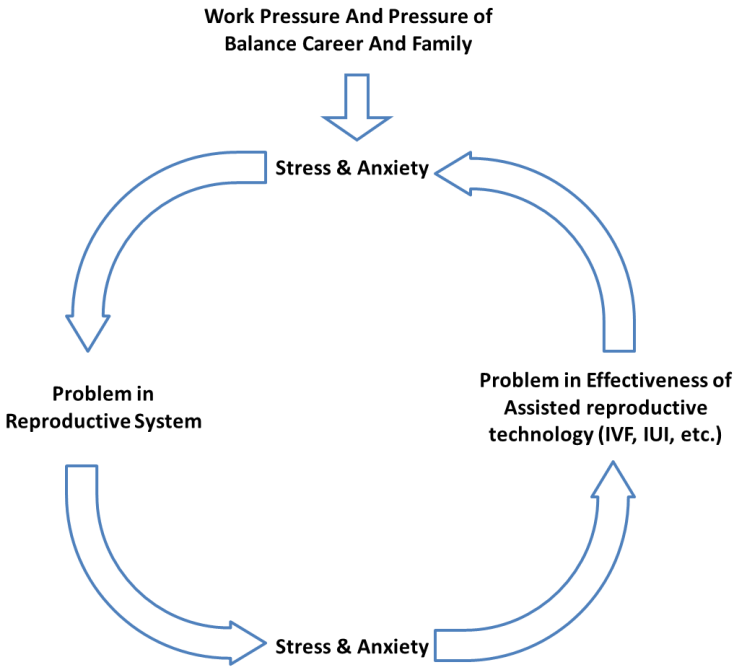
Since globalization, people have become less active. They spend their most of the time on mobile phone for entertainment, gaming and shopping. As a result, they are not involved in exercise and physical activities, impacting their overall health. People are facing problem of obesity due to lack of exercise, which may lead to Polycystic ovarian syndrome (PCOS) in women. It also cause hormonal imbalance, such as progesterone, estrogen, testosterone in male and female. These hormonal disruptions affect ovulation in women and sperm production in men.

People who are facing health problems or feeling embarrassed due to obesity start doing heavy exercises in gym to lose weight. Some people are more interested to look attractive, which leads to increase trend of bodybuilding and muscle gain. Heavy weight lifting is a increasing trend for bodybuilding. People do wrong exercises to build body quickly, which leads to severe health problem. Heavy exercise can adversely impact fertility in both male and female. Heavy exercise can cause problem with the testicle. It reduces sperm count, motility, testosterone. It also causes erectile dysfunction. Heavy weight lifting can cause hydrocele, because it strains the scrotum. Hydrocele is a swelling on one or both side of scrotum. Large hydrocele can put pressure on the testicles, which can effect sperm production. Heavy weightlifting may also cause varicocele. Varicocele is enlargement of veins within the scrotum. Vericocele leads to primary infertility in males. Women who engage in rigorous physical exercise may be at risk of infertility due to an ovulation and implantation defect (Emokpae and Brown, 2021) Heavy exercise can cause hormonal imbalance, which leads to ovulatory problem, damage the endometrium and cause amenorrhea in women. Amenorrhea is the absence of menstruation. These hormonal imbalances can cause infertility in females.

Stress and Anxiety

Stress is the most common problem in the world. Stress is an intrinsic process of sleep disturbance that induces many injurious health problems. Stress and anxiety could adversely impact reproductive system

of both male and female. In the contemporary Indian society, there is a lot of rush in life because earning is a main aim of human being for making their life more luxurious and comfortable. For fulfilling their aim and financial interdependence both male and female are working, which leads to problem of management of household work and office work for female. It results into stress and anxiety. Stressful life event like work stress and family pressure are associated with menstrual disorder which leading polycystic ovarian syndrome or disorder and ultimately result is it fertility (Bajeli-Datt, 2023). Stress can cause hormonal imbalance, disturb egg reserve of women which leads to problem in conceiving. It affects sperm quality and quantity, sperm mobility, semen concentration in men. There is enough scientific evidence to suggest that anxiety and depression could severely affect spermatogenesis, mainly by depressing testosterone secretion (Emokpae and Brown, 2021). Infertility patients experience at tremendous amount of emotional turmoil as the result of the year diagnosis the risk of depression anxiety and distress is high for infertile patients (Rooney and Domar, 2018). But for effective treatment partner should be stress free and relaxed. Stress disrupts effective medical treatment. It also ends the last hope of infertile couples.

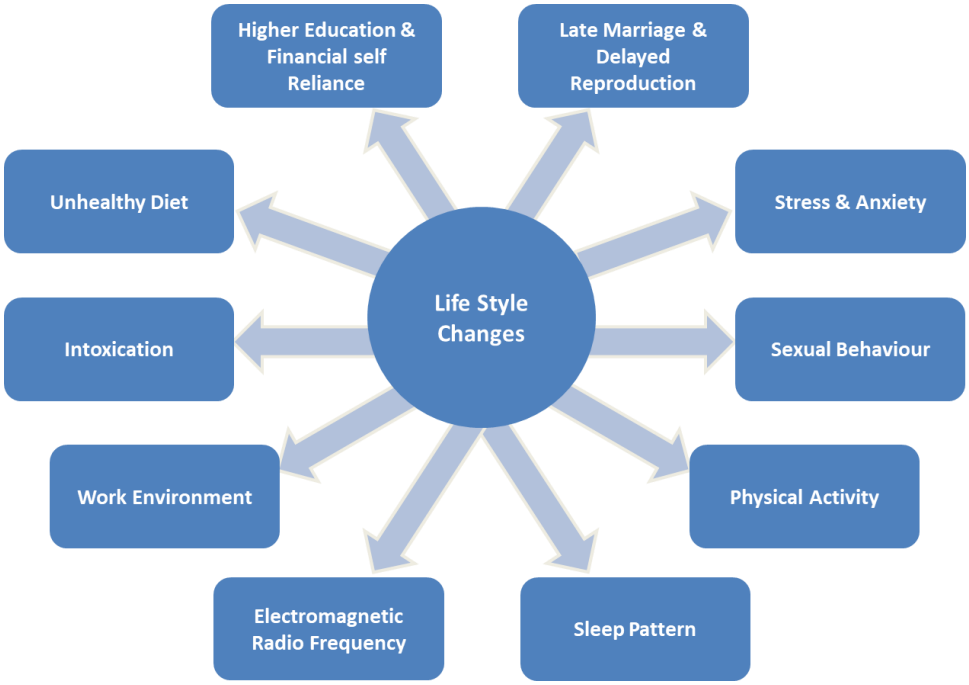


Stress and reproduction are significantly interconnected. Stress affects the reproductive system, which leads to problems in conceiving. The inability to conceive can further increase stress levels, which ends the last hope of having a child by undergoing treatment through assisted reproductive technology. This is a vicious circle, which continues continuously.

Sexual behavior

After globalization there is a major change in sexual behavior of people. People are involving sexual relationship before marriage. Due to influence of western culture people also engage with multiple partners, which also cause the sexual transmitted disease. The STDs most implicated include gonorrhea, Chlamydia and syphilis, which can cause damage through the scarring of fallopian tubes, and then lead

of fetal loss through spontaneous abortion or stillborns (Ericksen and Brunette, 1996). These sexual behavior leads to infertility. It was observe that having multiple sex partners and sexually transmitted infection work significant causes of infertility and induced abortions (Bajeli-Datt, 2023). Many of the sexually active people especially under age (teenager) are not using contraceptive (condom) and after that due to fear of pregnancy, they intake contraceptive without knowledge of its side effect and how to use. If pregnancy occurs despite this, then they do abortion by home remedies or brought medicine illegally from medical store without medical consultation. Abortion by improper care results into uterine infection, block fallopian tube.



Conclusion

Despite the substantial evidence of a decline in fertility with age and unhealthy living pattern, anxiety and risk associated with delayed childbearing, today's generation is valuing education, career and financial independence, which is serious threat to society. Medical advancement have offered treatment of infertility through Assistant Reproductive technologies (ART) i.e. IVF, IUI, ICSI etc. but life style factors significantly influence reproductive health in both men and women, there by also affecting medical treatment. Without lifestyle modification or healthy lifestyle medical treatment may not help in treating infertility, because medical treatment also requires time, nutrition, physical and mental rest to be effective. To reduce the rate of infertility life patterns need to be changed for which people should be educated about the problem of infertility and reproductive program should be run by health professionals.

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