

BEHAVIORAL CHANGES DURING PEAK FERTILITY OF WOMEN*Baishakhi Bairagi*^{1*}, *Himadri Pal*²¹ *Kalyani University, Department of Zoology, Kalyani, Nadia.*² *Research Scholar, Singhania University, Pachari Bari, Dist. Jhunjhunu, Rajasthan - 333 515 India.**Corresponding Author Email: baisakhi91@yahoo.com**ABSTRACT**

Our recent study has told that mating preference of women change across the menstrual cycle. During peak fertility of women they become more sexually desired and also they want to go to some social events to look for their partners. At this time they choose more revealing dress to go to the social events to attract different kinds of men. Our results also suggest that during peak fertility the women try to spend more times with their friends or to talk for a long time in phone. They also like to go to shopping at this time to look for new cosmetic products. Due to increased intrasexual competition at this time the women try to be more attractive than their low fertility times. They also try to avoid the male kin and this type of psychological status fluctuates according to the fertility status. These data also suggest that at peak fertility the women try to avoid the genetic relatives for the betterment of their offspring.

KEYWORDS

Menstrual cycle, female attractiveness, psychological changes, clothing and product choice, social events.

1. INTRODUCTION

It is a question, how and why we are promoted towards our mates and how the same rule has been continuing from generation to generation? The psychological literature and evolutionary psychology help us to know about the features of attractiveness and gives us information about the psychological changes from time to time. The ovulatory cycle, an important cue that has important role in changing behavior or attractiveness of women. In this study we investigate the behavioral changes of women during peak fertility. Here we also examine the attractiveness of women during peak fertility and how it can decline during other times of ovulatory cycle.

1.1 Hormonal regulation

Human ovulatory cycle is associated with a specific pattern of hormonal changes. The human ovulatory cycle spans on average 28

days. Approximately midcycle (14th day of the cycle) 24-36 hours after the luteinizing hormone and estrogen hormone surge the ovulation dominant follicle releases an ovum or egg in an event, called ovulation and the greatest chance for conception occurs within a 48 hour period surrounding ovulation (Eichner and Timpe 2004, Welcox et.al 2001). If pregnancy does not occur the two hormones drop significantly (Verners et.al. 2006; see also Apgar, Ganstead and Thornhill 2008). After ovulation the progesterone hormone secretes from corpus luteum. So, here the levels of estrogen and LH play an important role during peak fertility of women and also has some role in behavioral changes.

1.2 Psychological changes during the menstrual cycle

Main focus of the study is the effect of ovulatory cycle or a particular phase of the cycle on social evaluation. Women in their preferences and one biological explanation for within individual variation lie with hormonal changes across the menstrual cycle. Many studies have demonstrated that women preferences for certain male traits change across the menstrual cycle may enable women to maximize the benefits of their mate preferences potentially shifting priorities between heritable benefits to offspring and investment (penton-Voak et.al.1999). At peak fertility they are attracted to different kinds of men and express a greater interest in attending social gatherings (Haselton and Gangsted 2006) and report being more committed to their partners during luteal phase of the cycle and less committed in the follicular phase(Jones et.al.2005).

All types of behavioral and hormonal changes occur in women especially during reproductive life. Due to these changes the physical, psychological or behavioral functions also can be changed. During premenstrual phase a common syndrome can be seen, called premenstrual syndrome or PMS, typically involves physical, psychological and behavioral changes, such as:

Psychological: more than 200 different symptoms have been associated with PMS. As-irritability, tension, dysphoria, stress, anxiety, headache, mood swings, food cravings, confusion, and social withdrawal.

Physical and physiological: bloating, abdominal cramps, constipation, swelling in breast, joint or muscle pain and swelling, diarrhea, skin problems, thyroid disease, irritable bowl syndrome can be seen. During menstrual phase psychological, physical and physiological changes are:

Psychological: depression, irritability or food cravings get angry and become sad over very small things.

Physical and physiological: swollen and tender breast, diarrhea, and bloating, headache, and sebum production increase, fat deposition on skin, skin elasticity and resistant to wrinkling and skin pigmentation.

1.3 Psychological changes during peak fertility:

Here, our study deals with the behavioral or psychological changes during the peak fertility of a woman. Behavioral change during this time mainly includes increased desire towards their mates or increased attractiveness for different kinds of men and also tries to involve in social gatherings. Some evidences have suggested that this type of desire of women may be directed toward non primary partners (Gangestad, Thornhill and Graver, 2002), particularly if a woman's primary partner lacks specific indication of genetic fitness as symmetry (Gangestad, Thornhill and Graver-Apgar, 2005b), sexual attractiveness' (Haselton and Gangestad, 2006b, Pillsworth and Haselton, 2006) and major histocompatibility complex gene compatibility (Graver-Apgar, Gangestad, Thornhill, Millar and olp, 2006). The married women at this time become more attracted towards their partners and the unmarried women try to look for a boyfriend or search for a new boyfriend. They leave or reject her ex-boyfriend at this time for a new one. They try to spend more and more times with the new boyfriend and try to realize him as she is the most beautiful girl who has been looking for him for a long time. At peak fertility she tries to involve in physical contact with her new boyfriend and also desires for sexual contact. Due to changed behavior during this time women give more attention to be looking more attractive by applying

cosmetics as make-ups, hair products etc. Being intrasexually competitive they try to 'quality' mates when fertility is highest. At this time they may dress nicely to attract extra pair mates and also try to go to some places where different kinds of attractive men are present.

Physiological and physical changes during peak fertility: At this time the increased sexual arousal of women is marked by vaginal lubrication, swelling of external genitals and internal enlargement of vagina, swelling of clitoris and labia along with increased redness or darkening of the skin in these areas, slight abdominal pain and minor bleeding.

In this study we try to examine the feelings of women and their thinking about the men during peak fertility. That's why here we try to find out the particular point upon which they mostly concentrate during these times.

2. METHOD:

To study the behavioral changes of women during peak fertility a survey was conducted in 2012. Participants were 500 female and they were belongs to school, college students, unmarried woman, married women of age 17-35. They all were normal ovulating women. The mean age of the participants were 26 (SD- 5.47). The women were willing to state their voting preferences of some questions.

The women were asked to participate in the survey and were asked some questions about the behavioral changes during peak fertility of women. For this survey some question papers were prepared to ask them questions in different ways. The questions were about their feelings towards different kinds of men, their desire for choosing different from markets at this time, about their phone calls or with whom they try to speak at this time, their choice of dress for going some occasions at this time etc.

At first the women were requested to mention their menstrual onset dates, their age, their name at the top of question papers. After some time their voting for the questions were completed. Then the question papers were checked and following results were obtained.

3. RESULTS

Participants completed their answers of 15 questions. All the participants were heterosexual and all of them reported about their regular menstrual cycle of 28-30 days. Among 500 participants 17 women were using the hormonal contraceptive pills and others were not. On average the participants were 26 years old (SD- 5.47). According to their voting preferences during periods of high fertility women want to talk with their friends in phone and they try to spend more times with their friends rather than their parents or other relatives. Nearly 68 % (at df-1 and .05% level of significance the $\chi^2=94.92$) of women appreciated with the answer but 25% said no and 6.2% of women gave no comment. This pattern can not be seen during low fertility during this period the women want to be more beautiful and 65.8 % (at df-1 and .05% level of significance the $\chi^2=83.14$) of women said this but 26.6% said no and 7.6% were speechless. At this time they like to go to shopping and want to buy some make-ups and other cosmetics, nearly 81.8% (at df-1 and .05% level of significance the $\chi^2=270.07$) of women preferred this answer. 11% of women said that they have no interest in shopping and 7.2% gave no answer. At this time they are attracted to different kinds of men and 59% (at df -1 and .05% level of significance the $\chi^2=23.62$) of women said that at this time they want to flirt with some attractive men but 30% of them said that they have no feelings about men and 11% of them gave no answer.

When they were asked about their choice of dress during this time, 78.2% (at df-1 and .05% level if significance the $\chi^2=172.46$) of women said about fashionable or comparatively sexy dress while going to some occasions. 20% of them were not appreciated with this answer and 1.8% of

women gave no comment. At this time women want to be physically related or desire for. 58.2% (at df-1 and .05% level of significance the $\chi^2=51.27$) of women were appreciated with this answer but 28.4% of them said that they have no such type of desire and 13.4% was speechless.

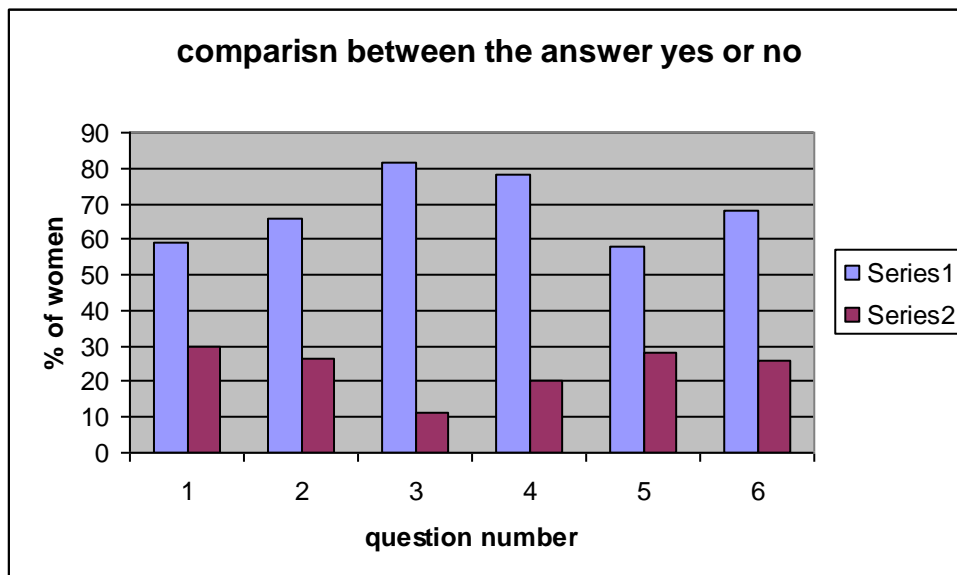


FIG: showing the comparing % of women who said the answer 'yes' or 'no' for the questions. Blue color indicates for the answer 'yes' and 'red' color indicates for the answer 'no'.

4. DISCUSSION

These data provide the information about behavioral changes during the peak fertility of them. During peak fertility the women try to avoid male kin as father mainly. They try to spend more times with their friends or try to spend more times in phone calls with their friends. And there is a negative correlation between the duration of calls to father or parents and duration of calls with their friends. Actually during the peak fertility of women the level of Estrogen hormone raises and responsible for such behavioral changes. Women try to be more attractive during this period and this time they involve in intrasexual competition. Our early work demonstrated that a large percentage of women at this time go to markets for shopping varieties of cosmetics. According to these data women try to make

boy friends or try to flirt with some attractive men at peak fertility. At this time the married women look for extra pair mate. This type of behavioral changes are due to the hormonal changes or it is a question that, why women search for extra pair mate at this time? But the evolutionary psychology can solve the question partially but not totally. Our recent study also tells that during peak fertility of women they desire for or try to involve in physical relation with different kinds of men. Results also suggest that the prediction that women prefer clothing that is more revealing and sexy near the onset of ovulation, particularly in mating relevant contexts. When they were asked that what type of dress they would go to a social event, they tried to indicate comparatively sexy when they were nearest to ovulation. Actually at

this time the women feel more sexual desire around the time of ovulation and thus they are motivated to dress more attractively. Results also suggest that the women during peak fertility are intended to go to some social events with their attractive dress to attract the men.

Our study also tells that a small percentage of women (6.42%) are not interested in such type of questions or they do not want to give their comment for such types of questions. Actually they do not want to feel or have no time to feel about such types of questions. They try to involve their mind in their duties as study, sports, and other works. Some women (22.5%) among the participants told that they have no feelings or they tried to prove that all the questions were meaningless and for all the questions they gave answer 'no'. But a large percentage of women (71.08%) were appreciated with our questions and said 'yes' for all the questions.

At last we can say that the menstrual cycle can affect the behavioral changes of women and behavioral changes during peak fertility of women are identifiable.

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