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Menarch

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ABSTRACT

Background: The age at menarche is amile stone,whiche is highly affected by internal & external factors. Menarche is considered as important point of sexual life of the girl.it is considered important factor indicator to the life style & risk factor influence.

Method: This observational cross sectional study was conducted among 70 girls participated, in the study at Mansour, Dora city & questionnaire was administered.

Result: There is association of five important factors on the age of menarche like mother's menarche age, socioeconomic status, type of diet(highly protein content, low protein &high vegetarian, physical stress & the interest in social media.

Conclusion: There is positive association between mother menarche age & age of menarche of the girl. Also, there is positive correlation between socioeconomic status of the family& age of menarche of the girl. Early age of menarche of the girl associated with high protein diet &exposure to sexual content in visual media., Delay at age of Menarche associated with physical activity at puberty.

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Introduction:

Menarch is consider adistinct mark for sexual maturation . It is also considered as an indicator of quality of life of a population, since a number of biological& socio-economic factors influence[1].The mean age at menarch was 12 years, the lowest age is at10 years &highest is at15 years. Variation in the time of puberty (onset timing of menarch) are marked between well of'& under privileged population with marked delay in menarch reported in under privileged [2]. Nutritional factors have been implicated in determing the time of onset of puberty&age of menarch(AOM) in humans as indicated by a delay of the adolescent growth spurt& its association with malnutrition[3] &by the association of accelerated development early menarch with a moderate degree of obesity.[4] Risk factors for breast cancer include early. Occurrence of menarch[5] for this reason, it is important to determine the possible influence of diet on(AOM). There is association of foods of animal origin with early menarch[6] High carbohydrate diet, low meat intake favored a later menarch. Jellies is associated with an earlier(AOM). Girls with early menarch were more likely to be overweight at age7,11,16 than those with late menarch [7] Early pubertal timing in girl is one of the best antecedents of arrange of mental health problems during adolescence. Early ages at menarch associated with higher rates of both depression antisocial behaviors in early middle adulthood largely, because difficulties that started in adolescence did not attenuated over time.[8]

Methods and Materials:

This observational cross-sectional study is conducted among secondary school for girls in Mansur city &Dora city. Girls age are between12&16 years. 70 girls participated in the study; questionnaire is administrated to girls in the period (2nd of January 2020-the end of February) of the same year. Questionnaire involved information needed from each girl about genetic factor effect on menarche, environmental condition, state of nutrition effect, effect of physical activity, family size effects-economic status of the family& its effect on age of menarche, physical stress of the girls, smoking, social media interest and its effect on age of menarche.

All the girls are provided with needed information about menarche age menstruation cycle symptoms associated with cycles, ways to adapted with them, secondary sexual characteristic &their important about reproductive health of women, sex education sanitary in the school.

Results:

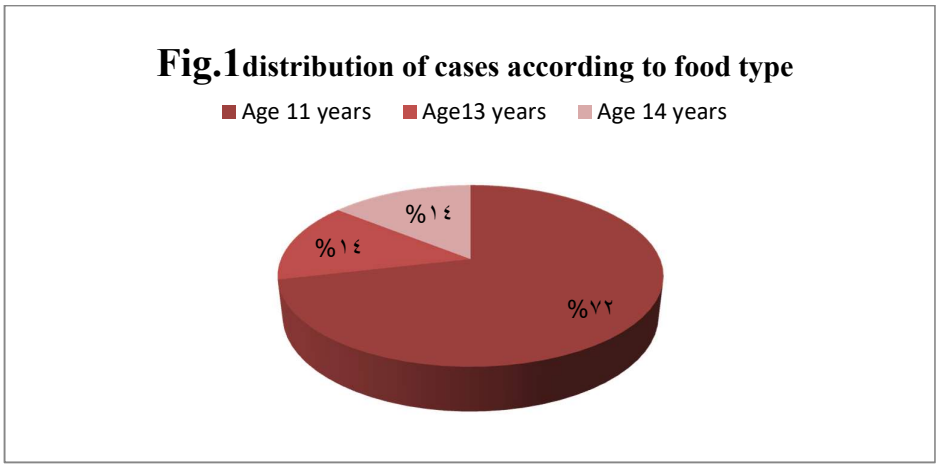
1-We take number of girls with meat high protein diet about 50, &10 number of girls with vegetarian food &low meat diet,10 number of girls they don't mind eat everything. (fig.1) (fig.2), we find early age of menarche in girls with meat high protein diet, girls with fellow protein diet have delay age of menarche.

2-We take age of menarche of the mother &number of girls, we find about 40 girls from 70 with age of mother at 13 year. (fig.3).

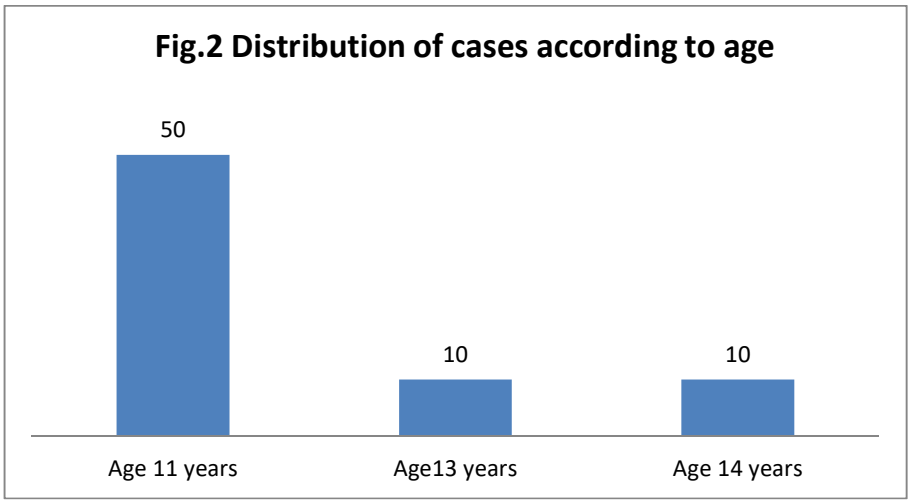
3-Physical activity of the girls delay age of menarche, =about 33girls with high physical activity &delay age of menarche at13,14-year,27 no. of girls with low physical activity &early age of menarche at11-12 year. (fig 4).

4-sexual content in social-media &early age of menarche, we find 39 girls with high interesting sexual contents &early age of menarche at 11 year. (fig.5), 25girls with low interesting in social media have delay in age of menarche.

5-social-economic of the family &early age of menarche, we find20girls with high social comic &early age of menarche at12 year(fig6).40 girls with good social economic stat &early age of menarche,10 girls with low social economic state, delay age of menarche.



The chi square value is 42.862. The p-value is <0.00001.the result is significant at <0.05



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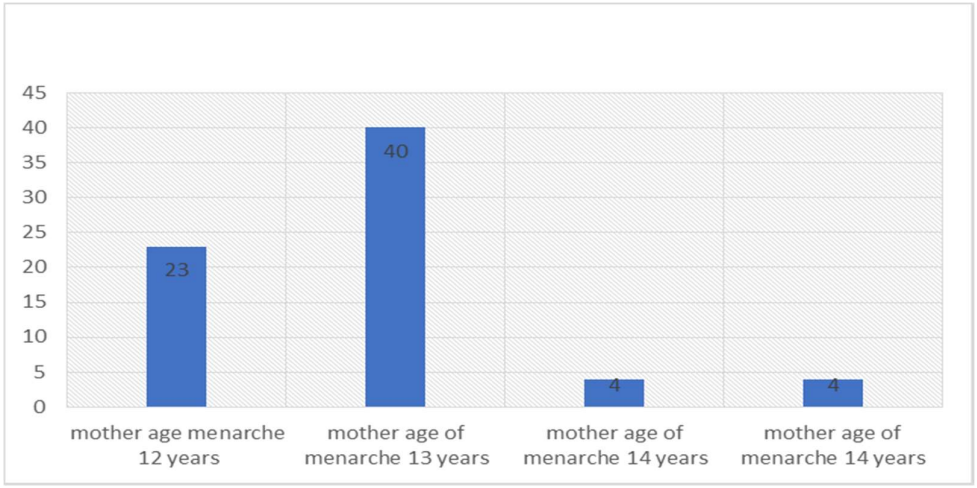
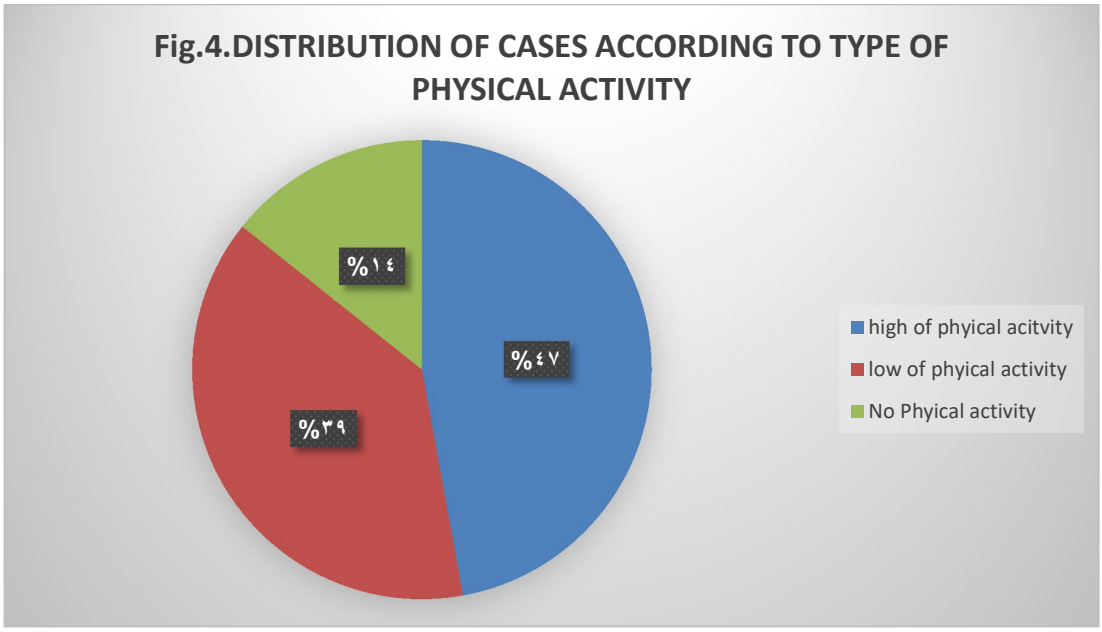
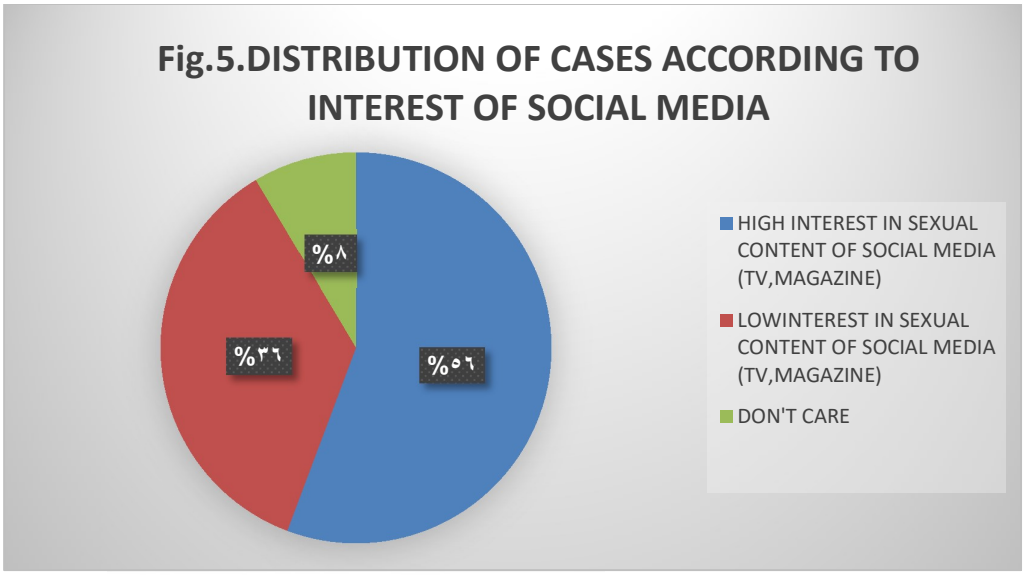


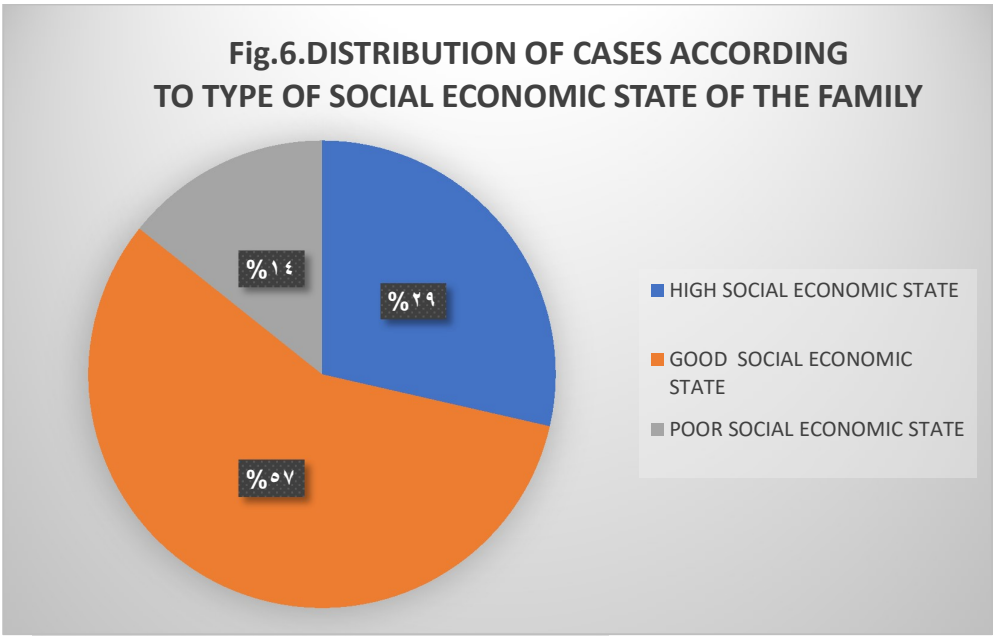
Fig.3 distribution of cases according to age of menarche of mother in year.
The chi square value is 49. 748.The result is significant at <0.05



The chi square value is 11.418. . The result is significant at <0.05



The chi square value is 22. 114.. The result is significant at <0.05



The chi square value is 18.406. The result is significant at <0.05

DISCUSSION:

In this study, we found positive relation between girls' diet associated with high meat intake favors early menarche, this agree with study done [9] this agrees also with a study done on Urbanized Bantu girls[10]. There is rational for studying diet &its influence on the age of menarche, is the association of early menarche with as increased risk of breast cancer [5]. Therefore, it is important to notice that meat intake is involved with an earlier age on menarche. The mechanism for precipitating menarche is still speculative. Frisch [11] propose that the initiation of menarche is the function of body mass, this conclusion is supported by an association of rapid growth early estrus in the rat [12].It is of interest to note that the use of meat result in greater body mass index those who ate meat compared to vegetarians [13]. In our study another positive relation observed between menarche age of mothers& their daughters. Asecular trend towards& earlier age at menarche has been regarded as positive indicator of a population health status[14]. This agree with study done in Jeddah , Saudi

Arabia [15].There are various environmental& genetic factors are involved which influence the age at menarche. Our result agrees with study done in Tehran depend on level of lipid glucose study [16] There is positive correlation of age at menarche with physical activity. There is Delay at age of menarche with physical activity during puberty. This agree with study done on october2016[17] ,This agree with a study done by Inger Thune [18],the study depend on that physical activity may affected hormonal concentration energy balance, greater physical activity was associated with reduce risk of breast cancer There is study done on daughters of obese mothers will get early age of menarche, but this relation is done via un measured shared factors. There is another positive relation between age at menarche and exposure to sexual content in visual media[19]. This agree with study done by Yogyakarta in 2013 which an early age of menarche at 11year. Sexual stimuli from direct observation, this sexual activity cause hypothalamus to stimulate secretion of specific hormones which influence the reproductive organ maturity. But Banten study report no significate effect of sexual activity on age of menarche, American study in 2005 indicate there is significant relation in see sexual content in movies, television, magazine. Yogyakarta agree with relation of sexual activity with age of menarche.

TityWulandarietal found in a study that there is no relation between sexual content &age of menarche in Islamic Junior high school girl. Social – economic status: In our study there is a correlation between social- economic status of the family& age of menarche, there is positive correlation between high good social-economic Status & early age of menarche, this agree with study done in US on girls[20] Another study agrees done in northern Sudan on girls between age of13-18 years in secondary school in 2006. Other study agree is done on November 2013 in Poland [21], The study is done on polish girls. This study disagrees with our study &is done in north-west of Iran in Sanandaj [22], the study says that there is no relation between age of

menarche& social economic status of the family.

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