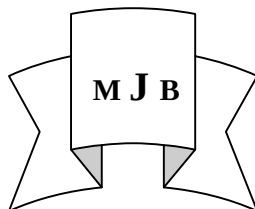


Menarche in Left Handers

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Abstract:

Background: Though the left handers are a minority but it is a very big minority as it constitute about 8-15% of the population. Many differences medical , social , behavioral and even in survival...etc., are found between right handers and left handers and one of the theories which is working is that left handers have a low potential for development than the other people who are programmed to be right handers and being a leftist is a way from normal.

Objective: To study one of the important differences between Rt and Lt hander by exploring whether the Lt hander females have a low potential for development than the Rt one, and also to compare the proportion of Lt handers in our society with others else where in the world.

Subjects and Methods: This study was done from the period Oct.2005- June2006 by screening 292 female student in the Technical institute in (Abu- Garak). In this study we consider the time of first menstruation as a marker for their development and we decided to call any one who does not have a period until fourteen or older a slow – maturing female.

Result: In this study we found that 31 female students out of 292 were left handers (10.6%). Also we found 7 out of 31 Rt hander females were slow maturing (22.6 %), While 15 out of 31 Lt hander females were slow maturing (48.4%). The average of Rt hander female that menstruated below 14 years age was (77.4%), While the average of Lt hander female that menstruated below 14 years age was (51.6%).

Conclusion: This result can be interpreted that left handed women are developing physically at a slower rate than their right handed counterparts. Also we found among those screened Rt handed females, menarche age was recorded at eleventh years old , while none was so in the other group. The total average of Lt hander was nearly similar to figures elsewhere in the world. Though there are so many differences in the left handers but these differences doesn't mean that they are inferior to the right handers. Cleverness, geniusness, sport heroes and famous painter all are seen among left handers.

الخلاصة

الخلفية: على الرغم من كون العسر أقلية إلا إنها أقلية كبيرة فهم يشكلون حوالي 8-15 % من المجموع الكلي للمجتمع. اختلافات كثيرة طبية، اجتماعية ، تربوية، نفسية و حتى بصحة الفرد و عمره تتواجد بين اليمين و العسر. و من المحطات الأكثر بروزاً إن العسر قد يكون معلماً لبطأ النمو.

الهدف من الدراسة: لدراسة واحد من أهم الاختلافات و الفروقات الأساسية الموجودة بين اليمين و العسر و هو سرعة النمو و النضوج و هل يعد العسر معلماً لبطأ النمو أم لا ؟ بالإضافة إلى دراسة نسبة العسر في مجتمعنا و مقارنتها بالنسب الموجودة عالمياً.

طريقة العمل: أجريت الدراسة ل 292 طالبة في المعهد الفني في محافظة بابل للفترة من تشرين الأول 2005 حتى حزيران 2006. في هذه الدراسة تم اعتبار بداية ظهور الطمث عند الفتاة العلامة الدالة على نضوجها و نموها و على أساس هذا فان الفتاة التي تحيض بعد سن الرابعة عشر تعتبر فتاة بطيئة النمو.

النتائج: في هذه الدراسة وجد ان (31) فتاة من أصل 292 كن عسراوات اليد (10.6%). وجد ان (7) من أصل 31 طالبة يمينوية اليد (22.6%) كن بطيئات النمو (ظهور الحيض بعد سن الرابعة عشر)، بينما (15) من أصل 31 طالبة عسراوية اليد (48.4%) كن بطيئات النمو ، لذا فنسبة يمينوات اليد اللواتي ظهر لديهن الحيض قبل سن الرابعة عشر هي (77.4%)، بينما نسب عسراوات اليد اللواتي ظهر لديهن الحيض قبل سن الرابعة عشر هي (51.6%) .

الاستنتاج: هذه الدراسة قد تعني ان نسبة النمو و النضوج الجنسي عند عسراوات اليد أقل مما هي عليه عند قريناتهن من ذوات اليد اليمنى كما وجدنا ان هناك نسبة من ذوات اليد اليمنى ظهر الحيض لديهن في سن الحادية عشر بينما لم نجد مثل هذه النسبة في المجموعة الأخرى.

النسبة الكلية للعسر كانت مطابقة تقريباً لمثيلاتها من النسب المسجلة في أنحاء العالم. على الرغم من كثرة الفروقات و الاختلافات بين العسر و اليمين إلا ان الكثير من العلماء و ذوي المواهب و القابليات الذهنية و الأبطال و مشاهير الرسامين نجدهم من العسر .

Introduction

Though the left handers are a minority but it is a very big minority as it constitute about 8-15 % of the population. (1)

It was made clear (specially in the last two decades) that there are a lot of differences , medical , social , behavioral and even in survival ...etc. between right handers and left handers , even the causes are partly genetic and partly environmental. (2)

Usually between about three and six years of age ,handedness comes to be quite well established . Some scientists have suggested that this trend reflects growth patterns that are going on in the brain and nervous system. (3) The two hemispheres of the brain grow at different rates, and are (usually the left) gradually establishes its dominance. (4)

One of the theories which is working is that left handers have a low potential for development as the people are programmed to be right handers and being a leftist is a way from normal. (5) And this probably have so many ways to explore and one which is suggested and agreed by so many is to check the time of the first menstrual period in the left handed females. Despite variations worldwide, the median age of menarche has remained

relatively stable , between 12 and 13years. (6) The most obvious set of changes that human beings undergo during their process of growing up occur during puberty. At puberty , individuals begin to develop most of their adult physical characteristics, and their bodies undergo rapid and dramatic changes. These changes affect the individual's height, weight ,voice, body shape, skin characteristics, and the functioning of the sex organs. Different individuals reach puberty at different ages. Generally speaking the better an individual's health status is the earlier he or she reaches puberty.(7) Looking for the timing of physical signs of puberty and sexual maturity might be a good way to see

if left and right handers mature at the same rate .

Subject and Methods

This study was done from the period Oct. 2005- June 2006 by screening 292 female student in the Technical institute in (Abu- Garak) which is situated a few miles from the Hilla city in Babylon governorate.

Being a female doctor this facilitate the screening which was done directly with privacy and respect to the volunteers . Left hander girls are those who are left handers for various activities like writing, eating, throwing, cooking and not only writing . Also we exclude ambidextrous so as not to confuse our conclusions.

What add to the validity of my study are :

- 1.All the students are beyond the age of 21 years so they can remember exactly what was the date of their first menstrual period.
- 2.Menstrual cycle for many it is remembered as a traumatic event and hence this event is usually clearly stamped rather than led loosely in the memory.

So we consider the time of first menstruation as a marker for their development and we decided to call any one who does not have a period until fourteen or older a slow – maturing female (8).

Fortunately nearly all of our students came from the same social class and we intend to exclude any one who showed gross physical defect or clear hormonal abnormality but fortunately none was so .

Results

In this study we found that 31 female students were left handers (10.6 %).

Table(1) shows the age of menarche in Lt hander females and the number of each group, while table (2) shows the age of menarche in Rt hander females and the number of each group also.

And because we consider the time of first menstruation as a marker for their development and we decided to call any one who does not have a period until fourteen or

older a slow – maturing female. (8) , We found :

No : of Rt hander females below 14 years are 24 female.

No : of Rt hander females above 14 years are 7 female.

No : of Lt hander females below 14 years are 16 female.

No : of Lt hander females above 14 years are 15 female.

So 7 out of 31 Rt hander females were slow maturing (22.6 %) ,While 15 out of 31 Lt hander females were slow maturing (48.4 %).

So (77.4 %) of Rt hander female menstruated below 14 years age, While (51.6 %)of Lt hander female menstruated below 14 years age as shown in Fig(1).

Discussion

In this study we found that 31 female students out of 292 were left handedness (10.6 %) and this figure is nearly similar to figures elsewhere in the world.(9), (10).

Many studies found that the average of menarche begins at about twelve and a half years of age and the data show that 75 percent of all women have their first period before they are fourteen.(11),(12) .In this study we found 64.5 % have their first period before they are fourteen regardless their handedness.

When we analyzed our data we found 77.4 % of Rt hander female menstruated below 14 years age, While 51.6 % of Lt hander female menstruated below 14 years age , this result can be interpreted as meaning that left handed women are developing physically at a slower rate than their right handed counterparts. Also we found among those screened Rt handed females, menarche age was recorded at eleventh years old , while none was so in the other group.

Though there are so many differences in the left handers but these differences doesn't mean that they are inferior to the right handers. Cleverness, genius ness, sport heroes and famous painter all are seen among left handers. (13)

Because the left handers are right brain dominant which is the brain of relaxation rather than seriousness which could explain some of the observed differences between the two groups (12).

Testosterone theory which is related to the left handers may be one of the causes which explained the differences between these two groups in which the slow maturing is one of them(3),(13).

I am not daring to draw a conclusion from this humble study but I put the results in front of you and thank you.

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Table (1) The age of menarche in Lt hander females and the number of each group.

<i>Age of menarche in left hander females</i>	<i>The No.</i>	<i>The percentage</i>
12 years old	6	19.4 %
13years old	10	32.3 %
14years old	8	25.8 %
15years old	4	12.9 %
16years old	2	6.5 %
17years old	1	3.1 %
Total	31	100 %

Table (2) The age of menarche in Rt hander females and the number of each group.

<i>Age of menarche in right hander females</i>	<i>The No.</i>	<i>The percentage</i>
11 years old	3	9.7 %
12years old	12	38.7 %
13years old	9	29.1 %
14years old	3	9.7 %
15years old	3	9.7 %
16years old	1	3.1 %
Total	31	100 %

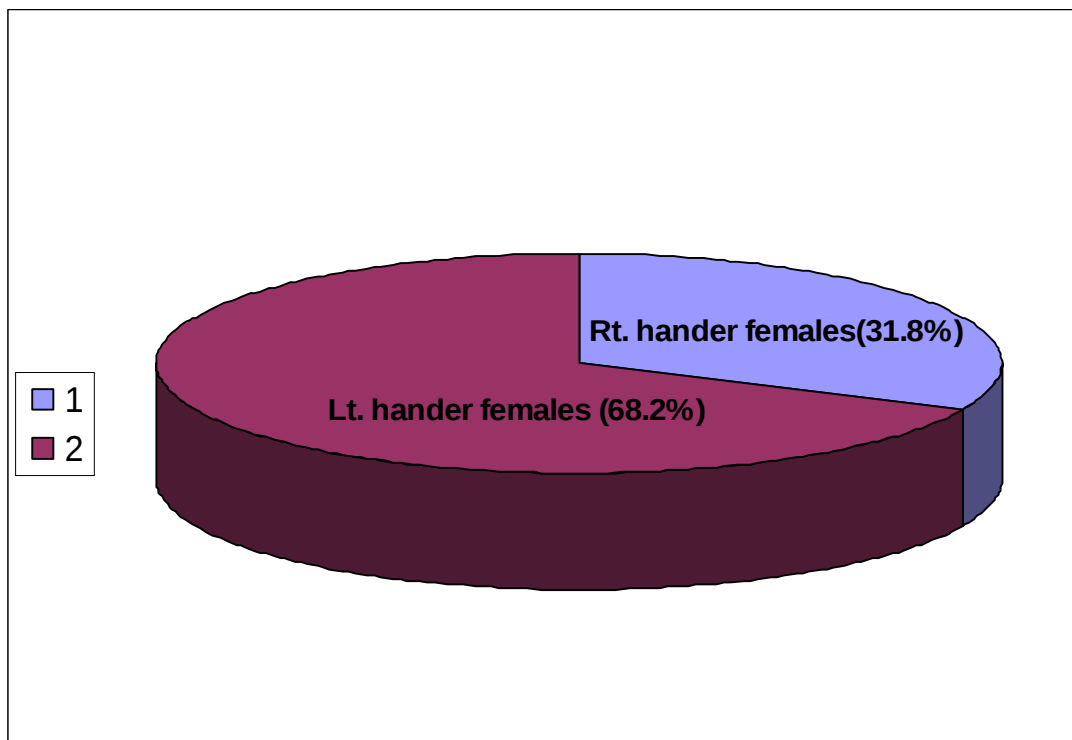


Fig .1 Percentage of slow maturing females in Rt. and Lt. handers.