Table 1: Demographic data:

		Intervention group (N=30)				Control group (N=30)				t*	P value
		Min.	Max.	Mean	SD	Min.	Max.	Mean	SD		
Age		18.00	39.00	27.80	5.67	18.00	37.00	24.27	4.49	2.68	0.01 HS
Height		1.45	1.80	1.62	.10	1.46	1.80	1.63	.08	0.46	0.65 NS
Weight		60.00	95.00	74.93	10.83	59.00	98.00	75.33	9.51	0.15	0.88 NS
BMI		25.26	32.66	28.41	2.19	22.04	38.28	28.29	3.11	0.17	0.87 NS
		N		%		N		%		X^{2**}	P value
Marital status	Single (virgin)	9		30.0%		13		43.3%		1.15	0.28 NS
	Married	21		70.0%		17		56.7%			
Parity	.00	6		28.6%		9		52.9%		2.77 FE	0.44 NS
	1.00	9		42.9%		5		29.4%			
	2.00	5		23.8%		3		17.6%			
	3.00	1		4.8%		0		0.0%			
Parity	0	6		28.6%		9		52.9%		2.34	0.13 NS
	>=1	15		71.4%		8		47.1%			

*Student t test   **Chi square test

- There is statistically **No significant** difference between two groups as regard Height, Weight, BMI, Marital status and Parity.
- There is **Highly significant** difference between the 2 groups as regard Age.

Table 2: Clinical data:

		Intervention group (N=30)		Control group (N=30		X^{2*}	P value
		N	%	N	%		
Duration of infertility (years)	0.50	1	4.8%	0	0.0%	7.14 FE	0.42 NS
	1.00	8	38.1%	5	29.4%		
	1.50	0	0.0%	3	17.6%		
	2.00	6	28.6%	6	35.3%		
	2.50	1	4.8%	0	0.0%		
	3.00	3	14.3%	1	5.9%		
	4.00	1	4.8%	2	11.8%		
	5.00	1	4.8%	0	0.0%		
Duration of infertility (years)	<=1	9	42.9%	5	29.4%	0.73	0.39 NS
	>1	12	57.1%	12	70.6%		
Acne	absent	0	0.0%	0	0.0%	-	-
	present	30	100.0%	30	100.0%		
Acanthosis	absent	12	40.0%	21	70.0%	5.46	0.02 S
	present	18	60.0%	9	30.0%		

	Min.	Max.	Mean	SD	Min.	Max.	Mean	SD	t**	P value
Average number of cycles per year	2.00	9.00	5.53	1.28	3.00	11.00	5.50	1.48	0.09	0.93 NS

*Chi square test (FE: Fisher Exact)   **Student t test

- **There is statistically <u>No significant</u> difference between the 2 groups as regard Duration of infertility and Average number of cycles per year.**

- **There is statistically <u>significant</u> difference between the 2 groups as regard Acanthosis.**

Table 3: clinical baseline data

		Intervention group (N=30)				Control group (N=30				X^{2*}	P value
		N		%		N		%			
Regularity of menses	Regular	1		3.3%		1		3.3%		0.00	1.00 NS
	Irregular	29		96.7%		29		96.7%			
		Min.	Max.	Mean	SD	Min.	Max.	Mean	SD	t**	P value
Hirsutism score		10.00	30.00	15.47	4.78	8.00	21.00	13.07	3.69	2.18	==0.03 S==

*Chi square test (FE: Fisher Exact) **Student t test

- **There is statistically <u>No significant</u> difference between the 2 groups as regard Regularity of menses.**

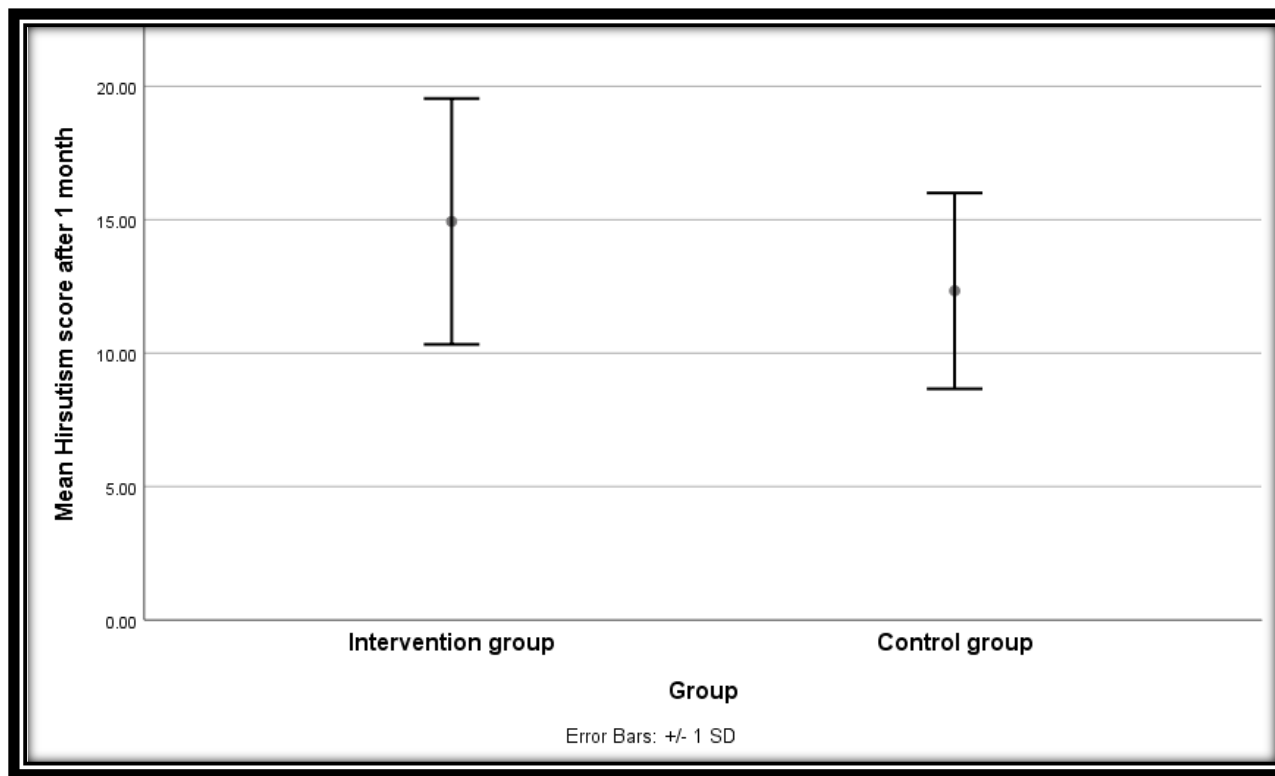- **There is statistically <u>significant</u> difference between the 2 groups as regard Hirsutism score.**

Table 4: Follow up data at 1 month:

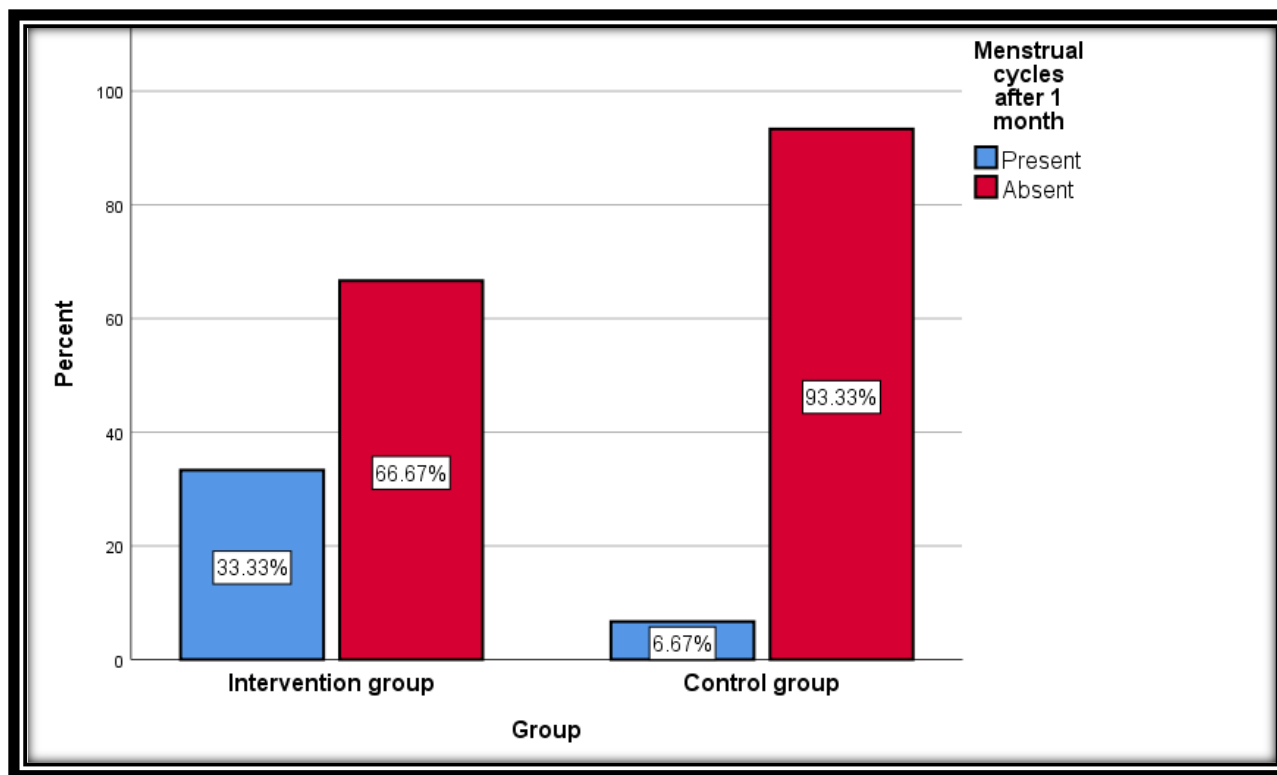|	Intervention group (N=30)				Control group (N=30)				t*	P value
	Min.	Max.	Mean	SD	Min.	Max.	Mean	SD		
Weight	55.00	90.00	71.60	11.00	57.00	90.00	72.22	9.01	0.24	0.81 NS
BMI	22.58	30.97	27.12	2.31	22.77	35.16	27.10	2.77	0.03	0.98 NS
Hirsutism score	9.00	28.00	14.93	4.61	8.00	21.00	12.33	3.67	2.42	0.02 S
	N		%		N		%		X^{2**}	P value
Menstrual cycles — Present	10		33.3%		2		6.7%		6.67	0.01 HS
Menstrual cycles — Absent	20		66.7%		28		93.3%			
Side effects — absent	27		90.0%		27		90.0%		0.00 FE	1.00 NS
Side effects — Abdominal discomfort	3		10.0%		3		10.0%			

*Student t test   **Chi square test (FE: Fisher Exact)

At the first month of the trial the following is noted:

- **There is statistically <u>No significant</u> difference between the 2 groups as regard Weight, BMI, Side effects of the drugs.**

- **There is statistically <u>significant</u> difference between 2 groups as regard Hirsutism scoring.**

- **There is statistically <u>Highly significant</u> difference between the 2 groups as regard Menstrual regularity.**

Figure (1): Change in Hirsutism scoring in the intervention and control groups after 1 month

Figure (2): Change in Menstrual Cycle Regularity in the intervention and control groups after 1 month
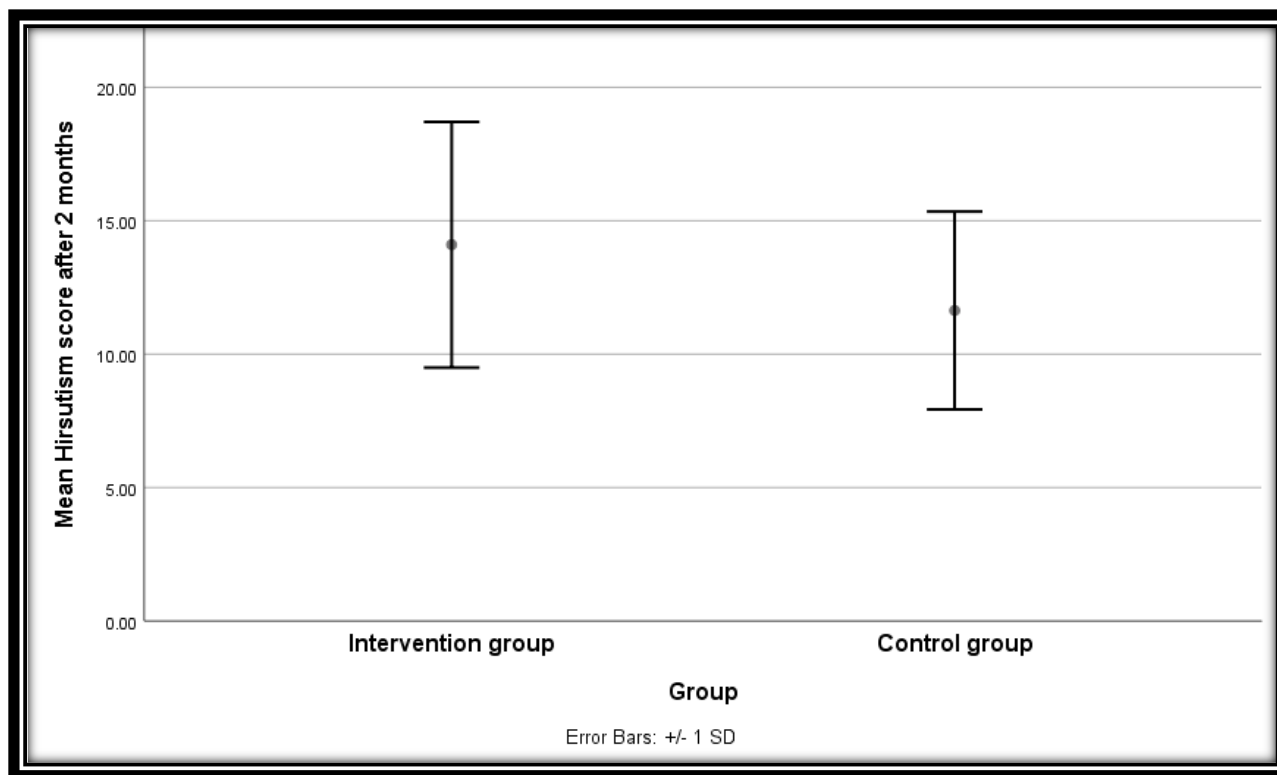
Table 5: Follow up data at 2 months:

	Intervention group (N=30)				Control group (N=30)				t*	P value
	Min.	Max.	Mean	SD	Min.	Max.	Mean	SD		
Weight	53.00	89.00	68.95	10.63	55.00	88.00	69.77	8.88	0.32	0.75 NS
BMI	22.21	30.80	26.13	2.32	20.20	34.38	26.19	2.82	0.10	0.93 NS
Hirsutism score	9.00	28.00	14.10	4.60	7.00	20.00	11.63	3.71	2.29	0.03 S
	N		%		N		%		X^{2**}	P value
Menstrual cycles — Present	22		73.3%		16		53.3%		2.58	0.11 NS
Menstrual cycles — Absent	8		26.7%		14		46.7%			
Side effects — absent	30		100.0%		30		100.0%		-	-
Side effects — Abdominal discomfort	0		0.0%		0		0.0%			

*Student t test   **Chi square test (FE: Fisher Exact)

At the second month of the trial the following is noted:

- **There is statistically <u>No significant</u> difference between the 2 groups as regard Weight, BMI, regularity of Menses.**
- **There is statistically <u>significant</u> difference between the 2 groups as regard Hirsutism scoring.**

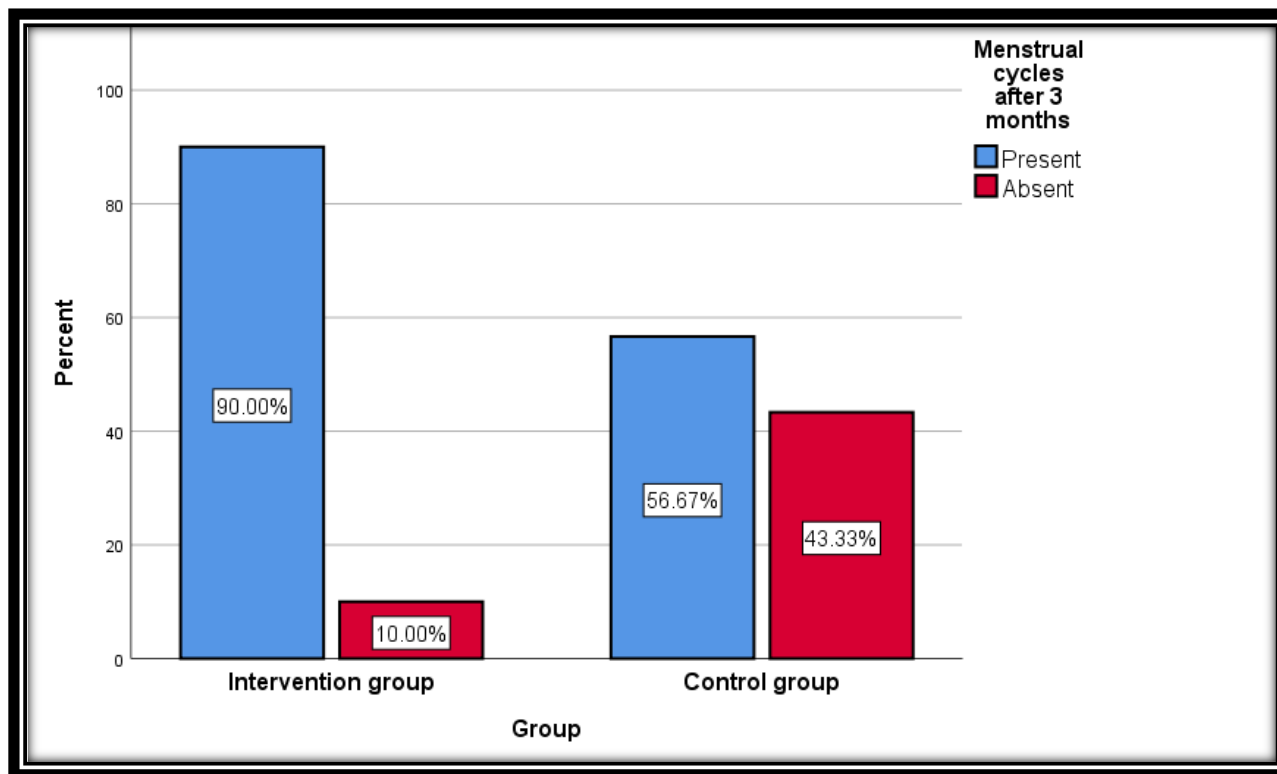**Figure (3): Change in Hirsutism scoring in the intervention and control groups after 2 months**

Table 6: Follow up data at 3 months:

		Intervention group (N=30)				Control group (N=30)				t*	P value
		Min.	Max.	Mean	SD	Min.	Max.	Mean	SD		
Weight		50.00	85.00	65.83	9.78	54.00	85.00	67.82	8.54	0.84	0.41 NS
BMI		22.14	29.76	24.95	2.12	20.20	33.20	25.48	2.83	0.81	0.42 NS
Hirsutism score		8.00	27.00	12.77	4.49	7.00	20.00	10.87	3.66	1.80	0.08 NS
		N		%		N		%		X^{2**}	P value
Menstrual cycles	Present	27		90.0%		17		56.7%		8.52	0.004 HS
	Absent	3		10.0%		13		43.3%			
Side effects	absent	30		100.0%		30		100.0%		-	-
	Abdominal discomfort	0		0.0%		0		0.0%			

*Student t test **Chi square test (FE: Fisher Exact)

At the third month of the trial the following is noted:

- **There is statistically <u>No significant</u> difference between the 2 groups as regard weight, BMI and Hirsutism scoring.**
- **There is statistically <u>Highly significant</u> difference between the 2 groups as regard Regularity of Menses.**

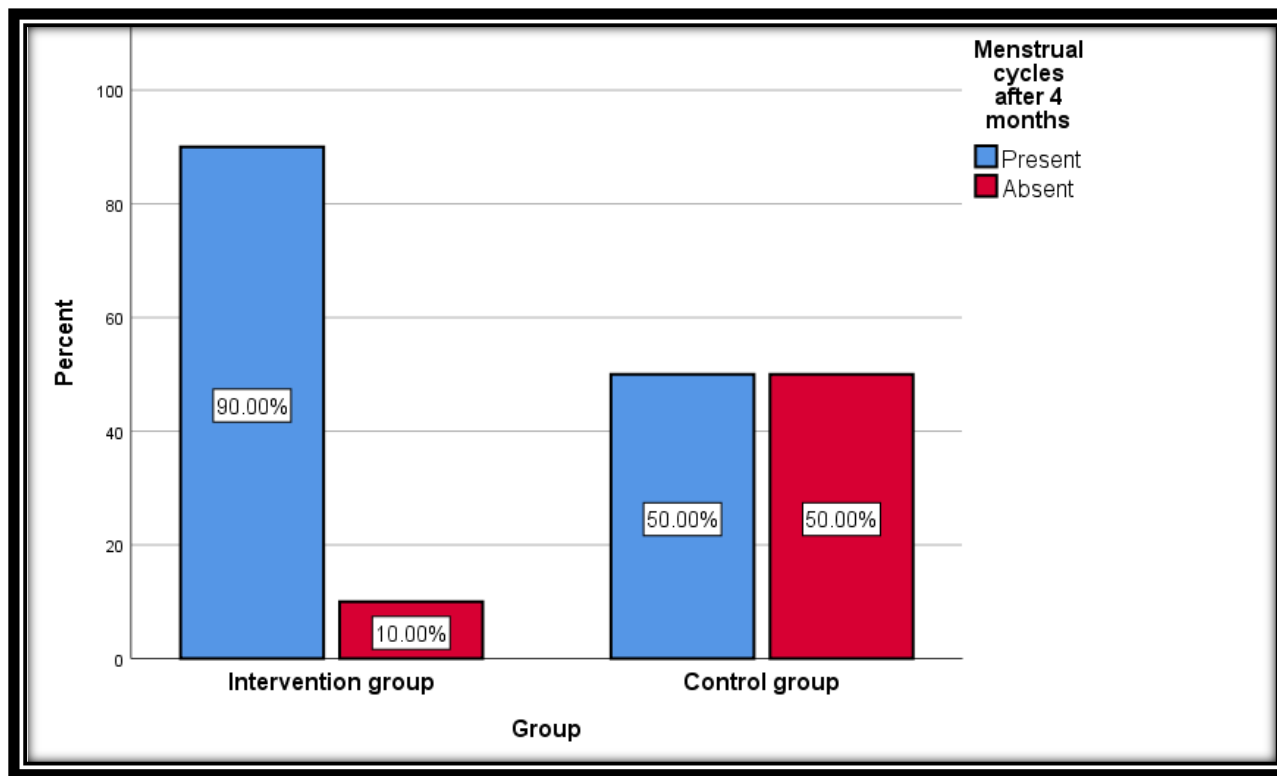**Figure (4): Change in Menstrual cycle regularity in the intervention and control groups after 3 months**

Table 7: Follow up data at 4 months:

		Intervention group (N=30)				Control group (N=30)				t*	P value
		Min.	Max.	Mean	SD	Min.	Max.	Mean	SD		
Weight		45.00	81.00	63.27	10.11	50.00	85.00	66.33	8.31	1.28	0.20 NS
BMI		21.05	28.00	23.95	2.19	21.55	33.20	24.92	2.78	1.49	0.14 NS
Hirsutism score		5.00	20.00	10.60	3.82	6.00	20.00	10.23	3.64	0.38	0.71 NS
		N		%		N		%		X^{2**}	P value
Menstrual cycles	Present	27		90.0%		15		50.0%		11.43	0.001 HS
	Absent	3		10.0%		15		50.0%			
Side effects	absent	30		100.0%		30		100.0%		-	-
	Abdominal discomfort	0		0.0%		0		0.0%			

*Student t test   **Chi square test (FE: Fisher Exact)

At the fourth month of the trial the following is noted:

- **There is statistically <u>No significant</u> difference between the 2 groups as regard Weight, BMI, Hirsutism scoring.**
- **There is statistically <u>Highly significant</u> difference between the 2 groups as regard regulation of menses.**

Figure (5): Change in Menstrual cycle regularity in the intervention and control groups after 4 months

Table 8: Change in follow up data in intervention group:

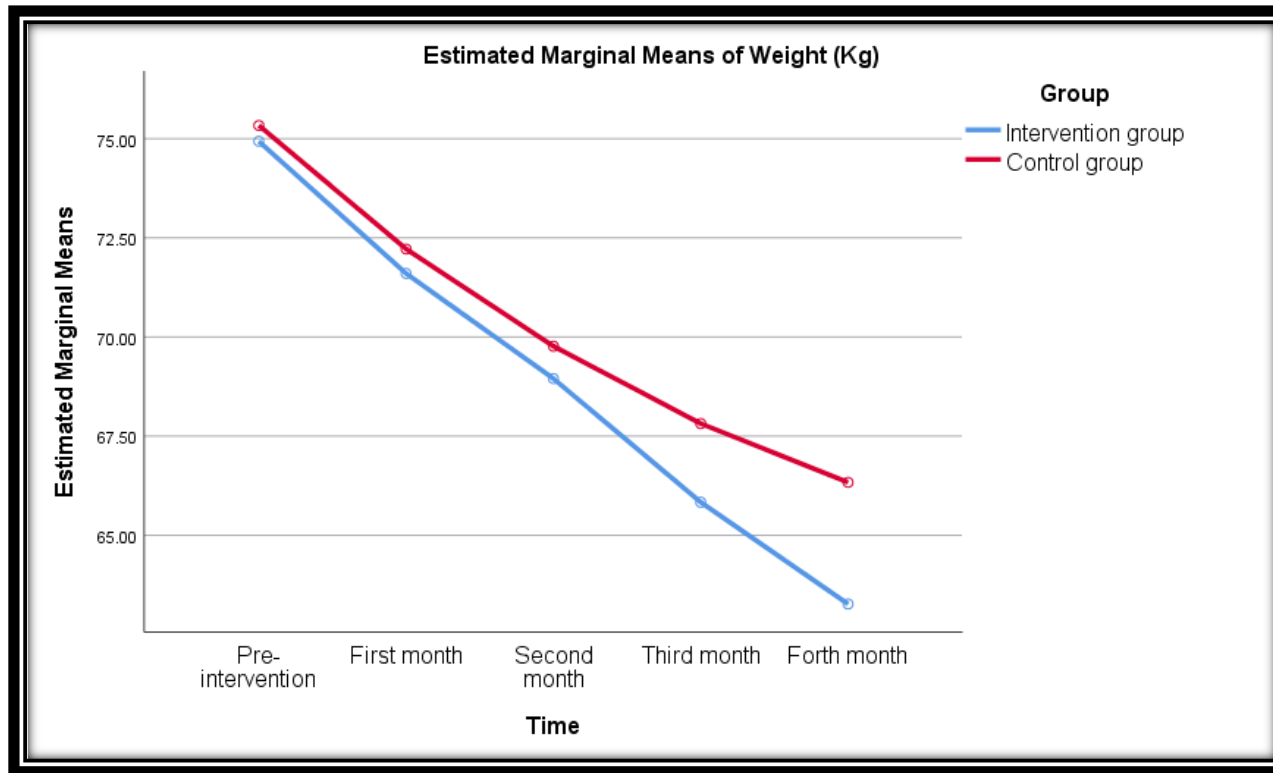|	Mean	SD	F*	P value
Weight 0	74.93	10.83		
Weight 1	71.60	11.00		
Weight 2	68.95	10.63	173.26	<0.001 HS
Weight 3	65.83	9.78		
Weight 4	63.27	10.11		
BMI 0	28.41	2.19		
BMI 1	27.12	2.31		
BMI 2	26.13	2.32	181.66	<0.001 HS
BMI 3	24.95	2.12		
BMI 4	23.95	2.19		
Hirsutism score 0	15.47	4.78		
Hirsutism score 1	14.93	4.61		
Hirsutism score 2	14.10	4.60	135.10	<0.001 HS
Hirsutism score 3	12.77	4.49		
Hirsutism score 4	10.60	3.82		

*Repeated Measure ANOVA test

- **There is statistically <u>Highly significant</u> difference in the intervention group from the start of the intervention till the end of the 4months duration as regard Weight, BMI, Hirsutism score.**

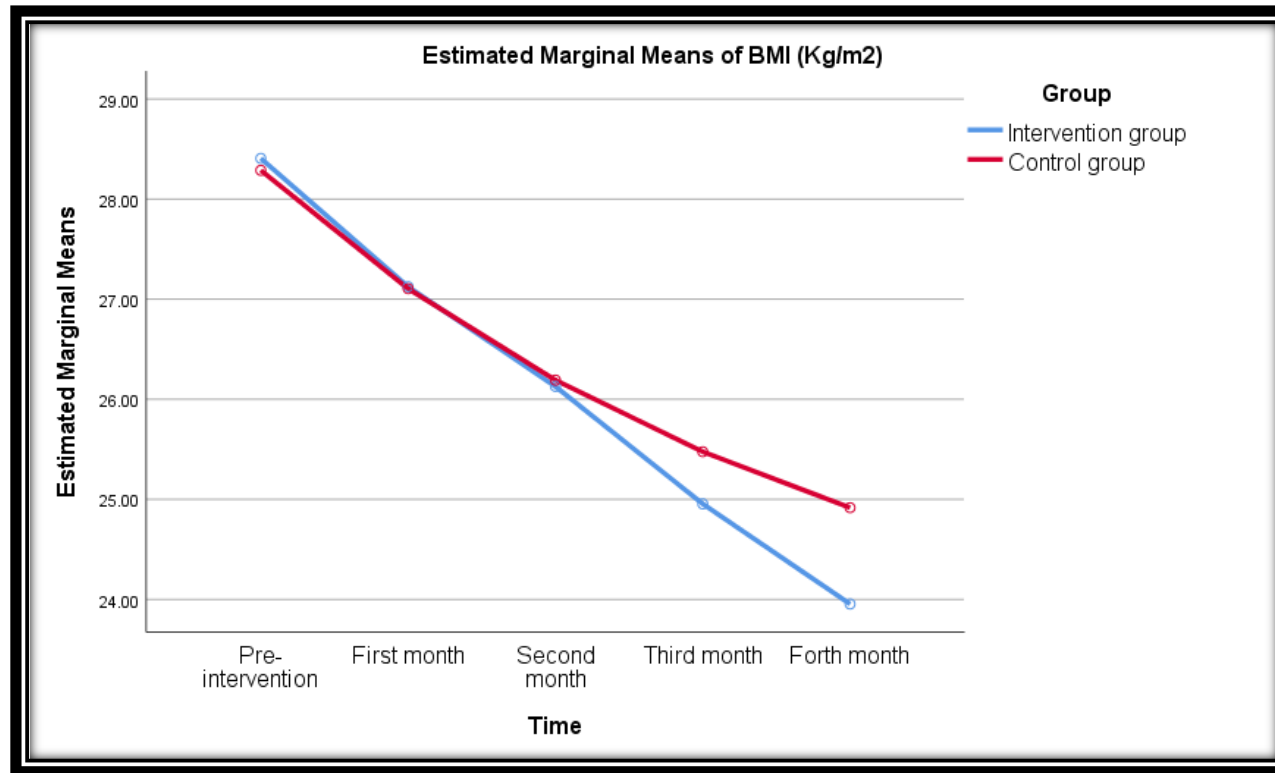**Table 9: Change in follow up data in control group:**

	Mean	SD	F*	P value
Weight 0	75.33	9.51	97.16	<0.001 HS
Weight 1	72.22	9.01		
Weight 2	69.77	8.88		
Weight 3	67.82	8.54		
Weight 4	66.33	8.31		
BMI 0	28.29	3.11	103.02	<0.001 HS
BMI 1	27.10	2.77		
BMI 2	26.19	2.82		
BMI 3	25.48	2.83		
BMI 4	24.92	2.78		
Hirsutism score 0	13.07	3.69	110.64	<0.001 HS
Hirsutism score 1	12.33	3.67		
Hirsutism score 2	11.63	3.71		
Hirsutism score 3	10.87	3.66		
Hirsutism score 4	10.23	3.64		

*Repeated Measure ANOVA test

- **There is statistically <u>Highly significant</u> difference in the control group from the start of the intervention till the end of the 4months duration as regard Weight, BMI, Hirsutism score.**
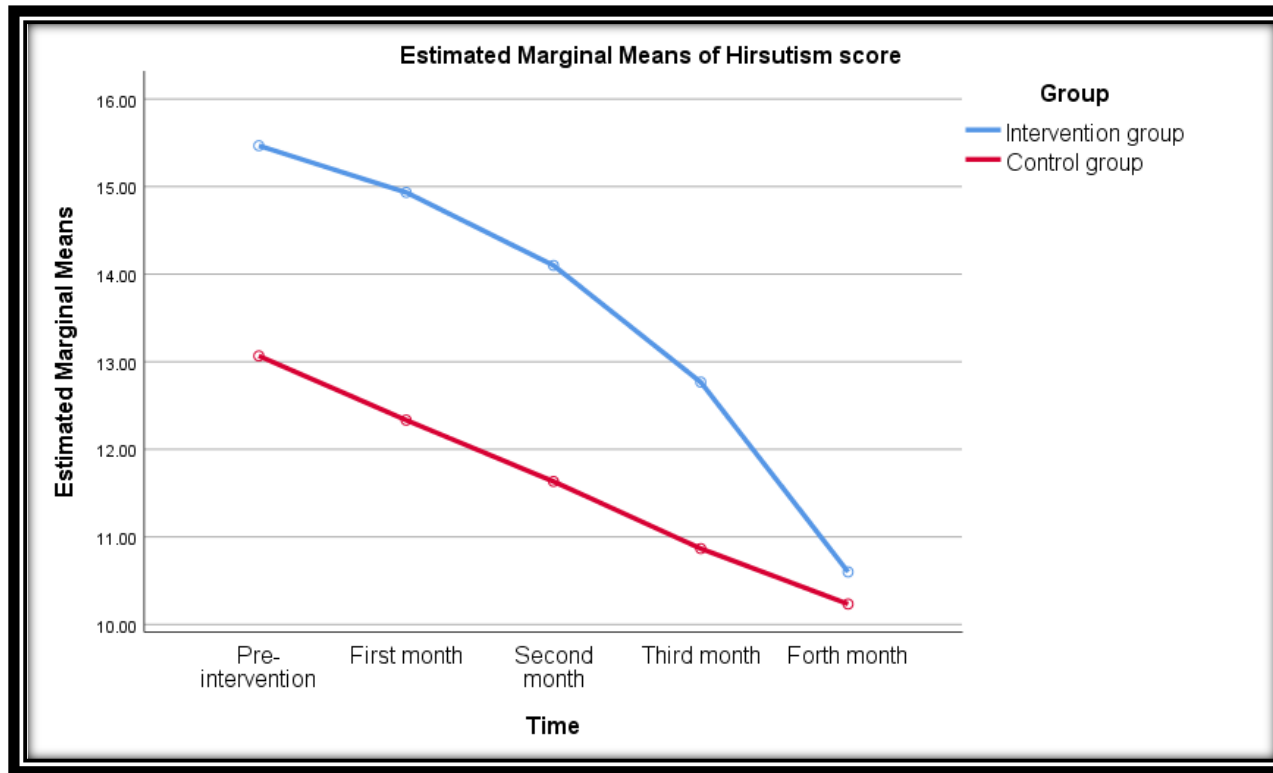
Figure (6): Change in Estimated Means of Weight in the Intervention and Control groups from the start of the trial to the end of the 4 months.

Figure (7): Change in Estimated means of BMI in the Intervention and Control groups from the start of the trial to the end of the 4 months.

Figure (8): Change in Estimated Means of Hirsutism scoring in the Intervention and Control groups from the start of the trial to the end of the 4 months.

Table 10: Change in follow up data from the start till the end of the 4 months

	Group			
	Intervention group		Control group	
	Before	After	Before	After
Weight	74.93	63.27	75.33	66.33
BMI	28.41	23.95	28.29	24.92
Hirsutism score	15.47	10.60	13.07	10.23

- There is statistically **Highly significant** difference between the two groups as regard Weight, BMI, Hirsutism score in favor of the intervention group.

Table 11: Comparison between two groups regarding percentage of change in follow up data:

	Intervention group (N=30)				Control group (N=30)				t*	P value
	Min.	Max.	Mean	SD	Min.	Max.	Mean	SD		
Percentage of change in Weight (%)	5.48	25.00	15.65	4.42	.00	17.72	11.80	4.89	3.20	0.002 HS
Percentage of change in BMI (%)	5.46	25.02	15.66	4.42	.00	17.70	11.80	4.89	3.21	0.002 HS
Percentage of change in Hirsutism score (%)	16.67	54.55	32.03	9.26	4.76	40.00	22.74	8.63	4.02	<0.001 HS

*Student t test

- **There is statistically <u>Highly significant</u> difference between the two groups as regard Weight, BMI, Hirsutism score in favor of the intervention group.**