

# Physical activity and quality of life in pregnant women in Spain

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## INTRODUCTION & AIM

Systematic reviews have shown that physical activity (PA) is one of the factors associated with better levels of Quality of Life (QoL) (1). Although multiple organizations recommend exercise during pregnancy, its practice decreases significantly. This problem increases in women with obesity (2).

Our purpose is to study the relationship between PA and QoL according to women's weight.

## METHOD

Observational study on women in the first trimester of pregnancy treated in the healthcare area of the Reina Sofía Hospital in 2023. Physical activity was measured with the International Physical Activity Questionnaire (IPAQ), which records physical activity and transforms it into Metabolic Equivalent of Task (MET). QoL was measured with the SF-12 questionnaire. Age, BMI and educational level were also measured.

## RESULTS & DISCUSSION

Fifty nine women were included: age (31 years; SD: 5.9), weeks of gestation (12.8; SD 1.2), and 72.9% were overweight or obese. Among these, the level of PA is moderate-high in 44%, while in those of normal weight it rised to 62%. The SF-12 score was 85.7% for women with normal weight and 78.5% for overweight or obese women (p=0.01). An interaction effect is observed between BMI and PA: obese women with high PA have a higher QoL than those with low PA (p=0.03), but this effect disappears in women with normal weight (p=0.4).

Table 1. Sample characteristics and differences according to BMI group

	Normal weight N=16 n(%)	Overweight/ Obesity N=43 n(%)	P value
<b>Physical Activity</b>			
Low	6 (37.5)	24 (55.8)	0.25
Moderate/High	10 (62.5)	19 (44.2)	
<b>SF-12 (mean, SD)</b>			
Physical score	89.4 (7.3)	81.4 (11.4)	0.01
Mental score	83 (12.4)	76.5 (13.5)	0.09
Overall score	85.7 (9.4)	78.5 (10.7)	0.02

Table 2. Factors associated with quality of life

	Univariate SF-12 (mean, SD)	p value	Multivariate Coef. B	p value
<b>Physical Activity</b>				
Low	78.0 (11.8)	0.04	ref	0.05
Moderate/High	83.0 (9.0)			
<b>Level of education</b>				
Primary	74.3 (11.2)		ref	
Secondary	83 (9.6)	0.01	7.8	0.01
Universitary	85 (9.3)		9.8	0.02
<b>Age (Pearson coef.)</b>	0.07	0.6		
<b>BMI</b>				
Normal weight	85.7 (9.4)	0.01	3.4	0.3
Overweight/Obesity	78.5 (10.7)		ref.	

## CONCLUSION

The level of PA was lower in overweight or obese pregnant women, and the influence of PA on QoL was greater in overweight and obese participants than in women with normal weight. These results support the need to maintain an active lifestyle during pregnancy, particularly in overweight or obese pregnant women. These findings will need to be confirmed with larger prospective studies that include other factors such as socioeconomic status, pregnancy complications, and previous exercise habits.

## REFERENCES

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