

# The Prevalence of Obesity and Physical Activity among Postpartum Women Attending Primary Healthcare Centers in Jeddah, Saudi Arabia, 2015

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## Introduction

- Excessive gestational weight gain increases risk of obesity and DM.
- Physical activity during and after pregnancy helps women to maintain their pre-pregnancy weight.
- Obesity increases the risk of maternal and fetal complications.
- In Saudi Arabia, the prevalence of obesity and physical inactivity is high, especially among women.

## Objectives

- To assess the prevalence of obesity and physical activity among postpartum women in Jeddah, Saudi Arabia.
- To assess the association of obesity and physical activity with each other and other characteristics.

## Methods

- 400 women selected from 6 PHCs
- Proportional multistage random sampling
- BMI was calculated
- Global Physical Activity Questionnaire was used
- Pedometers for all participants
- Multinomial/binomial logistic regression or generalized linear regression was used as appropriate.

## Results

- 380 questionnaires were completed and analyzed

Table 1. Demographic and Health Characteristics of Postpartum Women, Jeddah, Saudi Arabia, 2015

Women Characteristics	Mean (std)	Women Characteristics	Frequency (%)
Age (years)	28.66 (5.7)	Non-Saudi	253 (66.6)
Number of Children	2.59 (1.7)	Secondary school or more	257 (67.6)
Postpartum Duration (months)	8.93 (2.3)	Homemakers	312 (82.1)
BMI (kg/m <sup>2</sup> )	27.5 (5.8)	Income <10,000SR/month	308 (81)
Physical Activity (MET/week)	2815 (3286)	Obese	115 (30.3)
Daily Sedentary Time (minutes/day)	151.3 (111.9)	Meeting WHO recommendation	251 (66)
Steps Count	31,114 (25,305)	Report their pedometer readings	24 (6.3)

Table 2. P-values of Associations Between Dependents and Independents Variables among Postpartum Women in Jeddah, Saudi Arabia, 2015

	BMI	Weight Classes	WHO Recommendations	Physical Activity	Sedentary Time	Steps Count	Pedometer Reporting
Age	0.0002	0.001	0.875	0.82	0.007	0.215	0.744
Number of Children	0.005	0.126	0.934	0.969	0.003	0.208	0.793
Education	0.339	0.595	0.774	0.094	0.464	0.14	0.196
Work	0.839	0.903	0.379	0.639	0.239	0.02	0.169
Income	0.912	0.822	0.497	0.909	0.304	0.314	0.45
Nationality	0.183	0.336	0.879	0.097	0.403	0.05	0.375
Postpartum Duration	0.276	0.422	0.435	0.948	0.724	0.203	0.969
Sector	0.149	0.273	0.646	0.66	0.139	0.599	<0.001
BMI			0.298	0.993	0.279	0.41	0.303
Weight Classes			0.232	0.84	0.303	0.746	0.283
Physical Activity	0.297	0.371			0.589	0.402	0.059
WHO Recommendations	0.302	0.232			0.195	0.688	0.948
Sedentary Time	0.279	0.297	0.197	0.763		0.521	0.558
Steps Count	0.195	0.291	0.967	0.991	0.305		
Pedometer Reporting	0.317	0.283	0.948	0.231	0.566		
Significant							
Same Category							

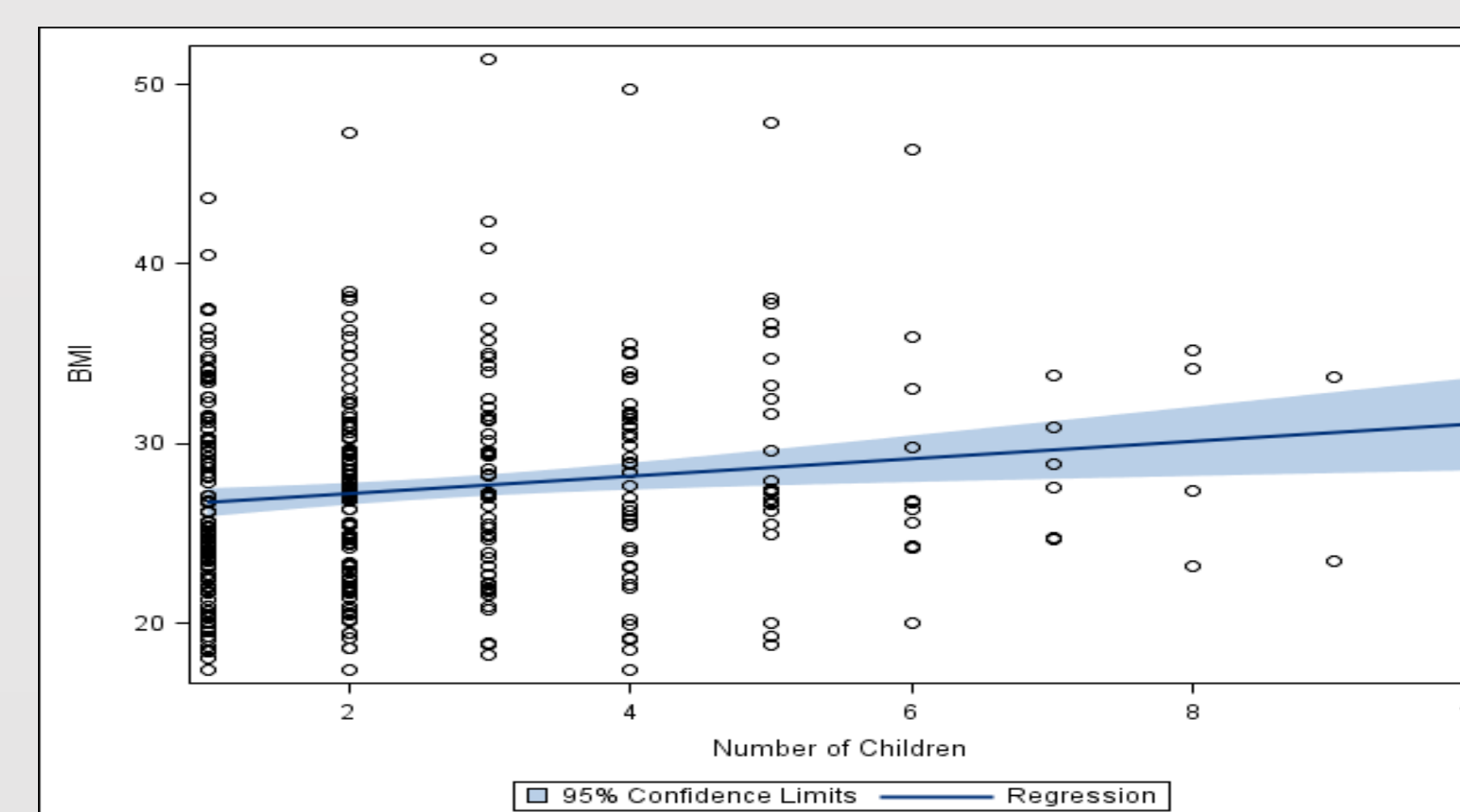


Figure 3. Correlation Between BMI and Number of Children Among Postpartum Women in Jeddah, Saudi Arabia, 2015

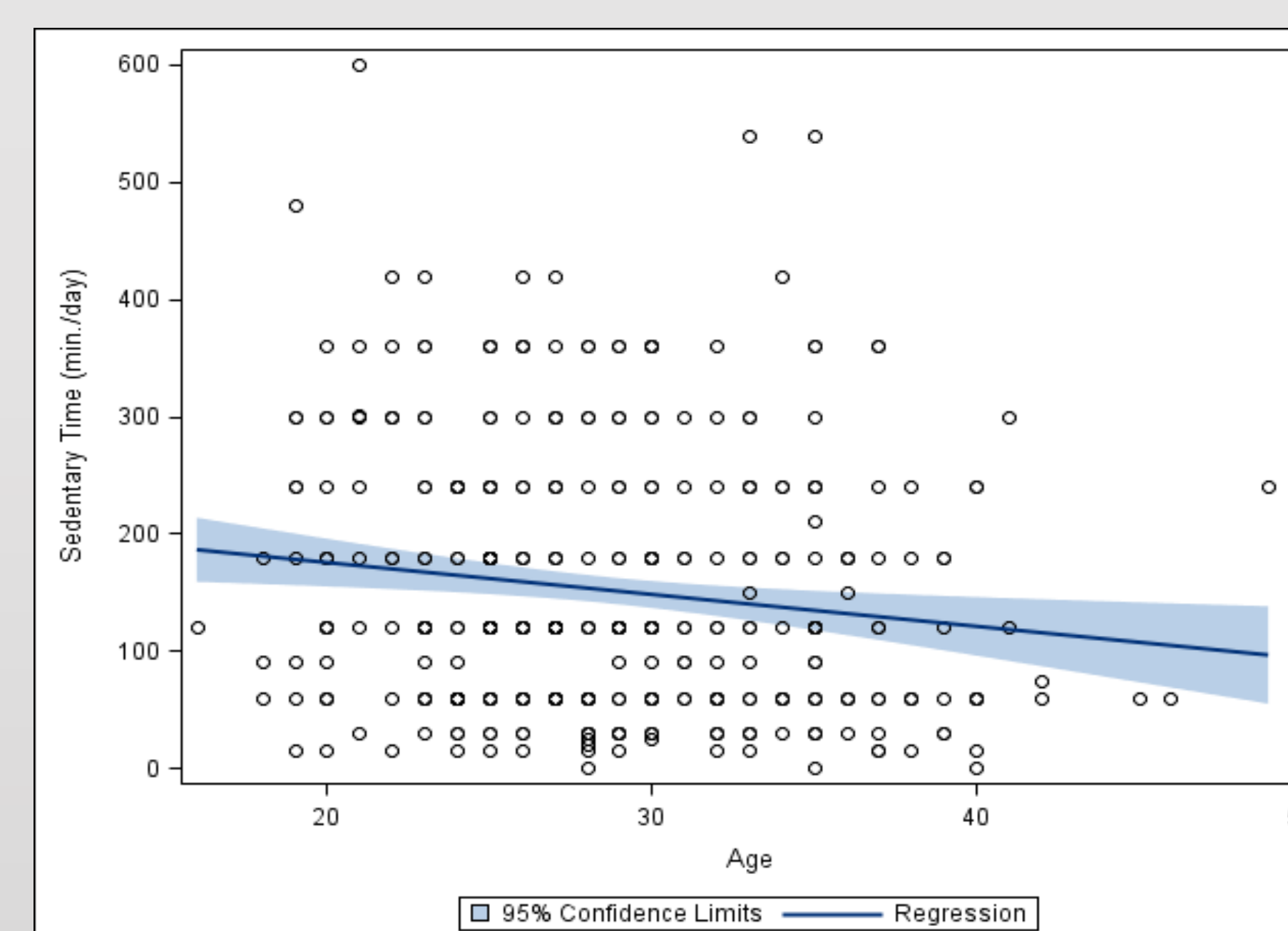


Figure 4. Correlation Between Daily Sedentary Time in Minutes and Age Among Postpartum Women in Jeddah, Saudi Arabia, 2015

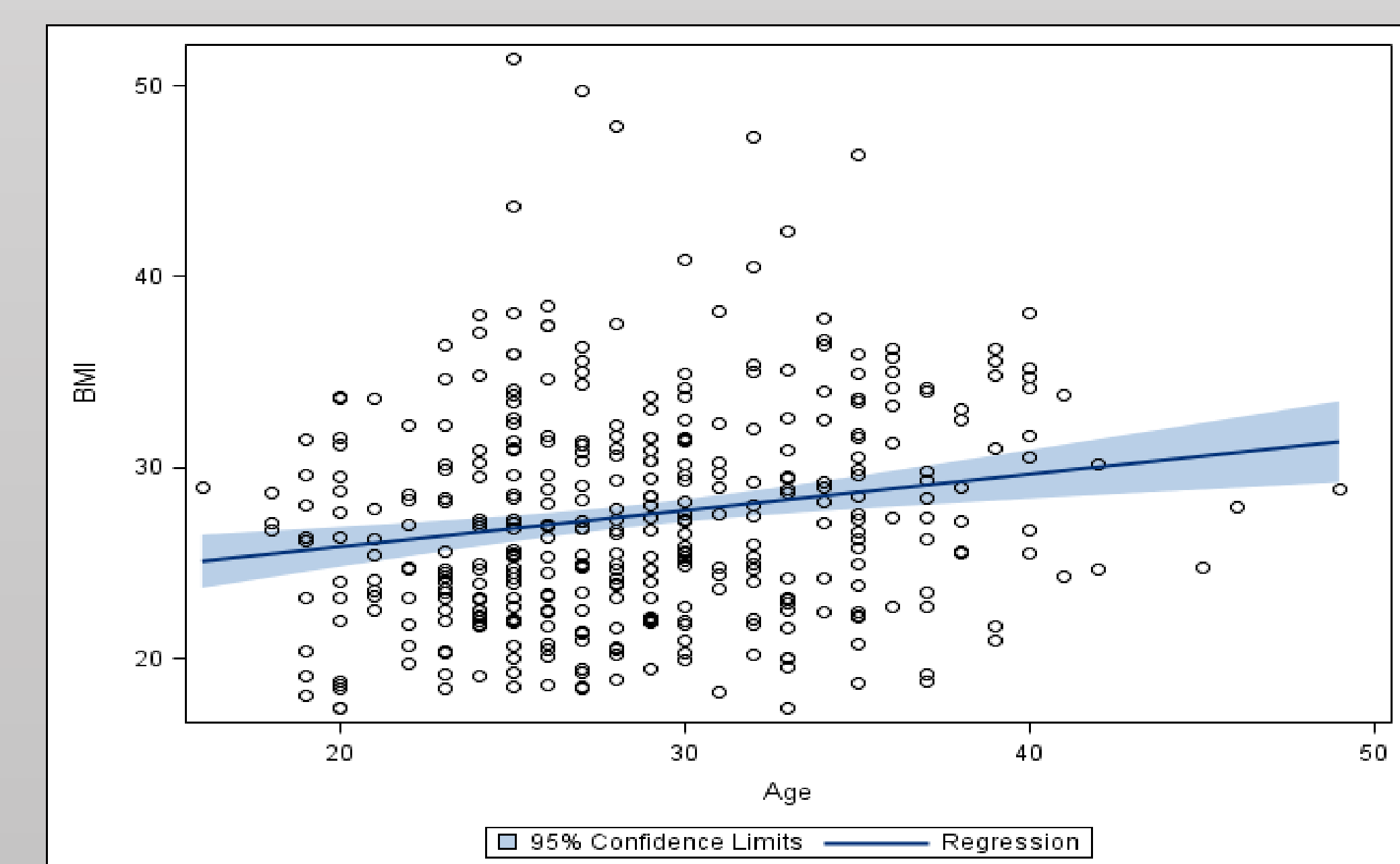


Figure 2. Correlation Between BMI and Age Among Postpartum Women in Jeddah, Saudi Arabia, 2015

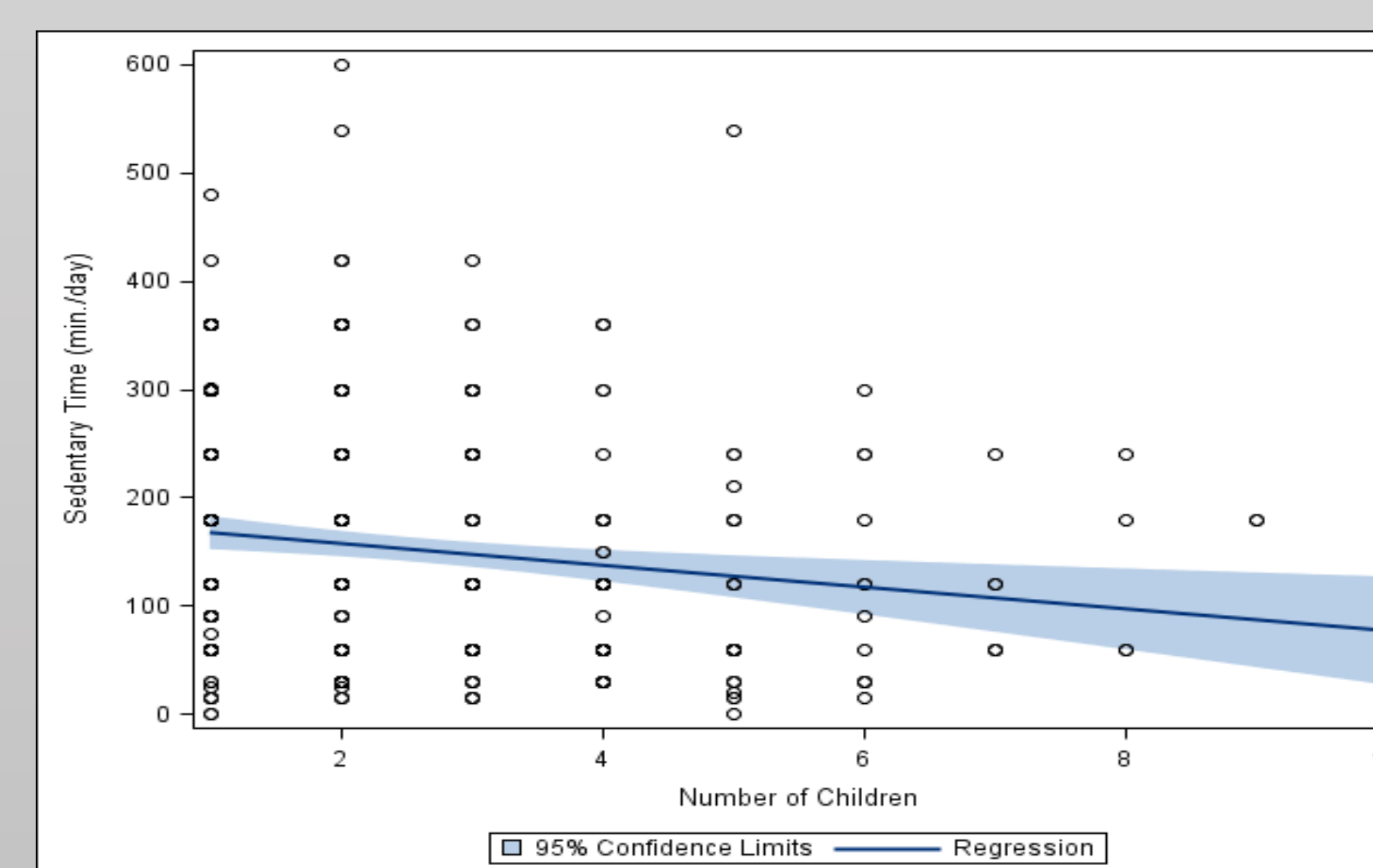


Figure 5. Correlation Between Daily Sedentary Time in Minutes and Number of Children Among Postpartum Women in Jeddah, Saudi Arabia, 2015

## Conclusion

- Two-thirds of postpartum women were overweight or obese.
  - Two-thirds of them met WHO recommendations for physical activity.
  - Average daily sedentary time was low compared to previous studies.
  - Older women who have more children were more obese and less sedentary.
  - With each year increase in age, postpartum women's BMI increases by 0.19 kg/m<sup>2</sup> and daily sedentary time decreases by 2.7 minutes.
  - With each additional child, postpartum women's BMI increases by 0.49 kg/m<sup>2</sup> and daily sedentary time decreases by 10 minutes.
  - Non-Saudis and homemakers walk less steps in a week.
  - There was no association between obesity and physical activity.
  - There were no associations between pedometer count reporting and other characteristics.
- ## Recommendations
- Establish a national postnatal care program to manage postpartum obesity.
  - Healthcare providers should advise women to incorporate physical activity in the postpartum women's social activities.
  - Further research is needed to explore antenatal and postnatal diets in Saudi Arabia.
  - Future use of pedometers in community-based research should incorporate additional socially-acceptable group interaction to encourage trust and participation.

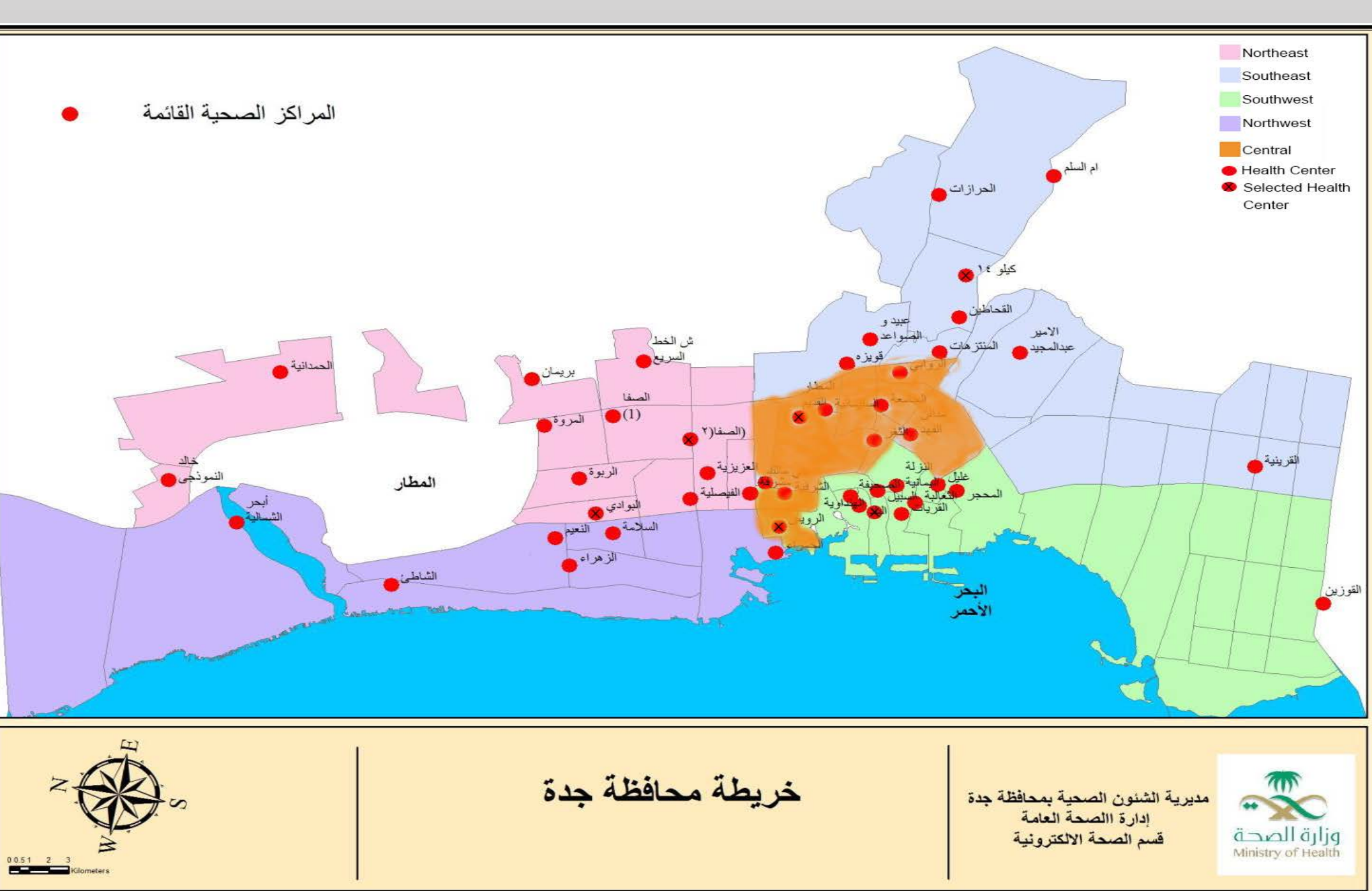


Figure 1. Jeddah Map Showing PHC Distribution and Selected PHCs

