Outcome of Obesity by Sex in Critically Ill Patients: A Retrospective Cohort Study

AUTHORS

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CONTACT INFORMATIONS

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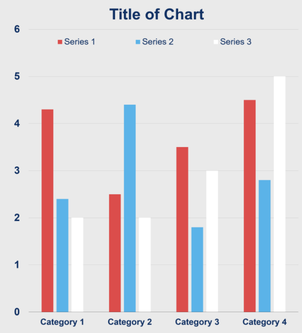
INTRODUCTION

AIM

METHOD

- Re-write your paper into poster format i.e.. simplify everything, avoid data overkill.
- Headings of more than 6 words should be in upper and lower case, not all capitals. Simplify the titles.
- Do not to write whole sentences in capitals or underline to stress your point, use **bold** characters instead.
- When laying out your poster, leave white space around your text. Don't overcrowd your poster.
- Spell check and get someone else to proof-read.



RESULTS

CONCLUSION

ACKNOWLEDGEMENTS

REFERENCES

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INTRODUCTION

- Obesity is increasingly prevalent among critically ill patients and is generally more common among females than males. However, whether the outcome of obese critically ill patients is influenced by the patient’s sex is unclear.

OBJECTIVES

- To evaluate the association of sex on the mortality of obese patients who were admitted to the intensive care unit.

- The secondary objective was to assess the ICU length of stay, the need for mechanical ventilation, the duration of mechanical ventilation, the need for tracheostomy, the use of vasopressors, the need for renal replacement therapy, the hospital length of stay, and the hospital mortality.

METHOD

A retrospective cohort study of adult obese patients who were admitted to the Intensive Care Unit of King Abdulaziz Medical City between 2002 – 2017.

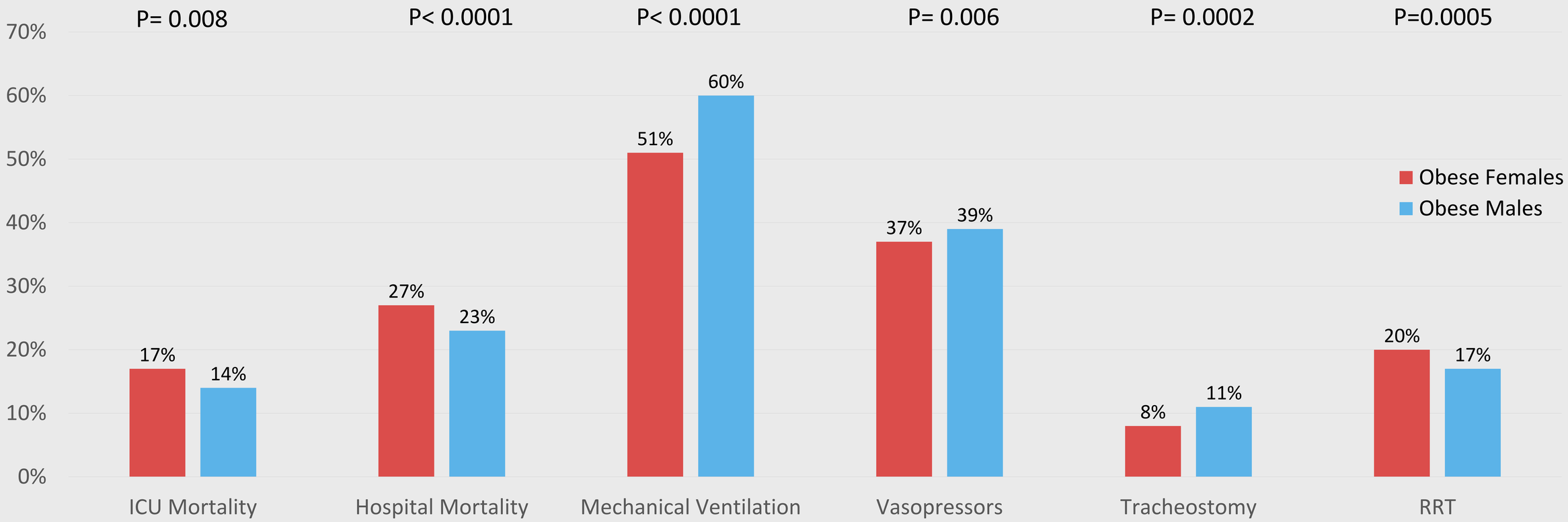
Obesity was defined as having a BMI > 30 kg/m2 according to the WHO definition.

Data on these patients were extracted from a prospectively collected ICU database.

RESULTS

Variable	All, n= 7277	Obese Males, n= 3312	Obese Females, n= 3965	P-Value
Age (yrs), median (Q1, Q3)	62 (46, 73)	58 (39, 72)	65 (52, 74)	<0.0001
BMI (kg/m2), median (Q1, Q3)	34.8 (32.0, 39.4)	33.8 (31.5, 42.9)	35.7 (32.5, 40.5)	<0.0001
Chronic liver disease, n (%)	556 (8)	230 (6)	326 (8)	0.04
Chronic respiratory disease, n (%)	1388 (19)	431 (13)	957 (24)	<0.0001
Chronic renal disease, n (%)	797 (10)	284 (9)	513 (12)	<0.0001
Chronic cardiac disease, n (%)	1782 (25)	740 (23)	1042 (26)	0.0001
Immunocompromized, n (%)	591 (8)	239 (7)	352 (9)	0.01
Admission for a medical reason, n(%)	5894 (81)	2625 (79)	3269 (83)	0.0006
Admission for trauma, n(%)	695 (10)	587 (18)	108 (3)	<0.0001

RESULTS



A multi-variable analysis showed no association between sex and ICU mortality in critically-ill obese patients (OR 1.04; 95% CI: 0.93 – 1.17; p = 0.52).

The following were found to be associated with higher mortality: age for every year increase (OR: 1.04; 95% CI: 1.01 – 1.02; p < 0.0001), chronic liver disease (OR: 5.04; 95% CI: 4.19 – 6.06; p < 0.0001), and chronic renal disease (OR: 2.19; 95% CI: 1.86 – 2.57; p < 0.0001). Admission due to trauma showed lower mortality (OR: 0.69; 95% CI: 0.53 – 0.90; p = 0.007).

CONCLUSION

- This study shows that obese females who are admitted to the ICU have a higher crude mortality rate than obese males.
- This finding is in-line with other studies.
- This difference is explained by differences in age (admitted females were older than males), patient mix (female patients were more likely to be admitted due to medical reasons and less for trauma), and co-morbid conditions.

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