



Gender Differences in EMS Transport Decisions and Activation Methods



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Abstract

Prior research suggests that gender-related disparities exist in medical treatment and health-seeking behaviors during emergency situations. This study evaluates whether gender-based differences in EMS utilization exist in a collegiate setting by comparing ambulance transport decisions and methods used to activate EMS, including calls to 911 or the campus police department.

Calls were categorized as medical or trauma, and data on patient gender, transport decision, and EMS activation method were extracted from 300 Patient Care Reports following removal of protected health information. Associations between gender, transport decisions, and EMS activation methods were assessed using chi-square testing.

No significant association was found between gender and ambulance transport decisions. However, a significant association between gender and EMS activation method was observed in trauma calls ($p = 0.03$), with female patients more likely to request EMS via 911 than male patients.

Although ambulance transport decisions did not differ significantly by gender within a collegiate EMS setting, gender was significantly associated with the method used to activate EMS during trauma calls. These findings suggest variation in how emergency care is requested on college campuses and highlight the need for further investigation into gender-related patterns of EMS utilization.

Introduction

Research suggests that gender-related disparities in medical treatment and health-seeking behaviors exist during emergency situations.¹ A previous study conducted by the University of Arizona EMS has investigated this claim within a collegiate EMS setting but found no statistically significant association between gender and patient requests for ambulance transport.² Further research is needed to better characterize gender-related differences in emergency care-seeking behaviors.

Our study aims to build upon prior findings and evaluate whether gender-based differences in EMS utilization exist by comparing patient requests for ambulance transport and method of EMS activation, including 911 or the campus police department number.

Methods

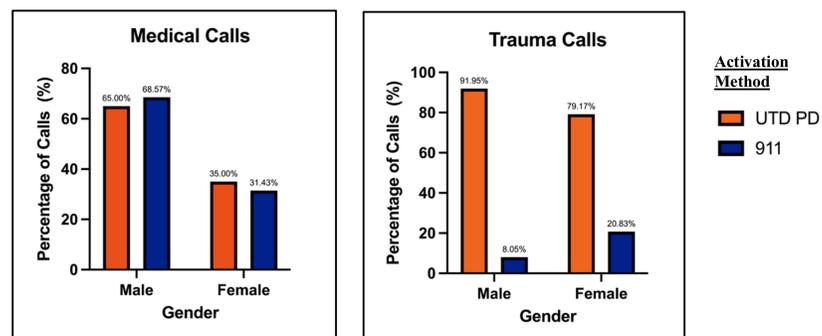
Calls were categorized as medical or trauma, and data on patient gender, ambulance transport decision, and EMS activation method were extracted from 300 Patient Care Reports. All protected health information was removed prior to analysis, and Institutional Review Board (IRB) approval was obtained.

Associations between patient gender, EMS activation methods, and transport decisions were analyzed using chi-square testing.

Results

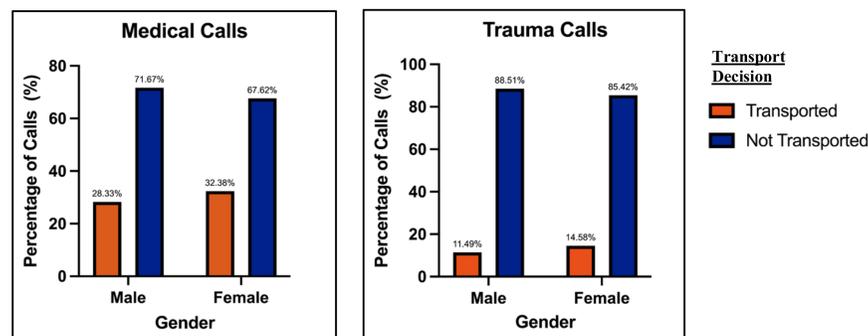
EMS Activation Method by Gender

- In medical calls, male patients more frequently requested EMS via 911, whereas in trauma calls, a higher proportion of female patients utilized 911.



Ambulance Transport Decision by Gender

- Frequency analysis showed that female patients had higher ambulance transport requests in both medical and trauma calls.



Chi-Square Analysis

Gender vs. Ambulance Transport Decision	
Call Type	p-value
Medical	0.59
Trauma	0.64

- No significant association was observed between patient gender and ambulance transport decisions.

- A significant association between gender and EMS activation method was observed only in trauma calls ($p = 0.03$), with female patients more likely to activate EMS via 911.

Gender vs. EMS Activation Method	
Call Type	p-value
Medical	0.61
Trauma	0.03

Discussion/Conclusion

Conclusions:

Findings were consistent with prior research showing no significant association between patient gender and ambulance transport decisions within collegiate EMS. However, a significant association was observed between gender and EMS activation methods, particularly during trauma calls, with female patients more likely to utilize 911. These results suggest that gender-related differences in EMS utilization may occur upstream, particularly in the method used to activate EMS on college campuses.

Implications:

The observed association between gender and EMS activation method in trauma calls may reflect differences in perceived injury severity or hesitancy toward EMS utilization. Recognizing these patterns may help collegiate EMS agencies develop targeted initiatives to promote appropriate EMS use and equitable access to emergency care.

Limitations:

This study was limited by a single-agency dataset and a sample size of 300 calls, which may limit generalizability. Additionally, calls were not stratified by severity level, which may have influenced observed gender differences in EMS-seeking behaviors.

References

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