Sigma Theta Tau International's 29th International Nursing Research Congress

Factors Associated With Emergency Among Older Adults at the Emergency Department in South Korea

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Purpose: Older adults' emergency departments(EDs) visits increase globally and South Korea is not an exception. Since the patterns of older adults' EDs visits differed from other age groups, identifying their risk factors related to emergency would be beneficial. We particularly selected the winter season (January, February, December) when older adults' ED visit rates were high.

Methods: Upon the IRB approval, we reviewed and analyzed 2,496 EDs visits aged 65 and over during the winter season in 2016. Data were collected via electronic medical records between May 1 and July 30, 2017 from two hospitals located in an urban and rural complex city. Chi square test and logistic regression were applied using SPSS 22.0.

Results: Among the participants, women comprised 53.5% and 17.6% of visits were done by aged 85 and older. Those who lived with their family members comprised 78.6% while 10% lived alone and 11% were transferred from long-term care(LTC) facilities. EDs visits by personal vehicles were 66.1% and 33.9% used ambulance. Status of emergency of the EDs visits were rated by Korean Triage and Acuity System and 68.6% were emergent conditions. About 20.9% received any kinds of public assistantships. Commonly reported chief complaints of the EDs visits were hypoalbuminemia (21.2%), chest pain (18.6%), dyspnea (14.0%) and abdominal pain (8.7%). Among them, chest pain (OR=3.605, 95% CI: 2.258-5.755), dizziness (OR=22.010, 95% CI: 10.755-45.042), dyspnea (OR=5.324, 95% CI: 3.694-7.674) and hypoalbuminemia (OR=1.408, 95% CI: 1.108-1.790) were clinical risk factors for being-emergent condition among older participants in EDs. Although there were no statistically significant differences among places before admission, there were a tendency that older adults transferred from LTC facilities represented a high risk of being emergent condition.

Conclusion: More than two-third older adults' EDs visits were emergent status. In order to reduce unexpected EDs visits by older adults, the reasons for not controlling chief complaints needed to be identified. As older adults transferred from LTC facilities increase, environments of EDs needed to equip them for providing proper emergent care for older adults.

Title:

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Keywords:

Korean Triage and Acuity System, emergency departments and older adults

References:

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Abstract Summary:

Older adults' emergency departments(EDs) visits increase globally. Since the patterns of older adults' EDs usage differed from other age groups, identifying their risk factors related to emergency would be beneficial. Chest pain, dizziness, dyspnea and hypoalbuminemia were related to emergency in EDs visits by older adults in South Korea.

Content Outline:

Introduction

Older adults' emergency departments(EDs) visits increase globally and South Korea is not an exception. Since the patterns of older adults' EDs visits differed from other age groups, identifying their risk factors related to emergency would be beneficial.

This is a retrospective study and we reviewed and analyzed 2,496 EDs visits aged 65 and over during the winter season in 2016. Chi square test and logistic regression were applied using SPSS 22.0.

Body

Among the participants, women comprised 53.5% and 17.6% of visits were done by aged 85 and older.

78.6% of the participants lived with their family members while 10% lived alone and 11% were transferred from long-term care(LTC) facilities. About 20.9% received any kinds of public assistantships.

EDs visits by personal vehicles were 66.1% and those who by ambulance were 33.9%.

Status of emergency of the EDs visits were rated by Korean Triage and Acuity System and 68.6% were emergent conditions.

Commonly reported chief complaints of the EDs visits were hypoalbuminemia (21.2%), chest pain (18.6%), dyspnea (14.0%) and abdominal pain (8.7%). Among them, chest pain (OR=3.605, 95% CI: 2.258-5.755), dizziness (OR=22.010, 95% CI: 10.755-45.042), dyspnea (OR=5.324, 95% CI: 3.694-7.674) and hypoalbuminemia (OR=1.408, 95% CI: 1.108-1.790) were clinical risk factors for being-emergent condition among older participants in EDs visits.

Although there were no statistically significant differences among places before admission, there were a tendency that older adults transferred from LTC facilities represented a high risk of being emergent condition.

Conclusion

More than two-third older adults' EDs visits were emergent status. In order to reduce unexpected EDs visits by older adults, the reasons for not controlling chief complaints needed to be identified. As older adults transferred from LTC facilities increase, environments of EDs are needed to equip them for providing emergent care properly for older adults.

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