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Exploring the Predictors of Non-Urgent ED Visits in Five Community-Based Canadian Hospitals

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Purpose:

Although emergency departments (EDs) serve the primary purpose of providing urgent care for a wide range of health problems, they are often misused for primary care of non-urgent health conditions; a practice that compromises their efficiency in treating emergency patients. Thus, the purpose of this study was conducted to explore the independent predictors of non-urgent ED visits in southwestern Ontario, Canada.

Methods:

Secondary analysis was conducted on archived administrative data of 597,373 patient visits to five EDs in southwestern Ontario, Canada over a one-year period. Specifically, stepwise binary logistic regression was conducted to identify the independent predictors of non-urgent ED visits in five community-based hospitals located in southwestern Ontario, Canada. We measured level of acuity using the Canadian Triage Acuity Scale which is mandated for use in all Canadian EDs.

Results:

Our results suggest that older (OR = .992; 95% CI .992 – .993) and female patients (OR = .940; 95% CI .929 – .950) were less likely to visit the ED for non-urgent causes. The data further suggest that non-urgent visits were 19.6% and 21.3% less likely to occur in evening and overnight shifts, respectively, compared to the day shift. Non-urgent ED visits were 19.6% and 21.3% less likely to occur in evening and overnight shifts, respectively, compared to the day shift. Health care providers were 1.92 times more likely to refer patients with non-urgent health problems to the ED than patient self-referral. Patient diagnosis, type of hospital, mean of transportation, proximity to ED, and time of year were also independent predictors of non-urgent ED visits.

Conclusion:

Our findings suggest that the issue of non-urgent ED visits is attributed to multiple modifiable patient and healthcare system factors. Thus, effective strategies to control and manage this issue shall be based on good understanding of such factors. Our finding that health care providers are more likely to refer patients to the ED for non-urgent complaints was surprising and is especially concerning.

Title:  
Exploring the Predictors of Non-Urgent ED Visits in Five Community-Based Canadian Hospitals
Keywords:
Emergency Department, Predictors and non-urgent visits

References:


Abstract Summary:
We explored patient and healthcare system related predictors of non-urgent ED visits in five community-based Canadian hospitals. Our results suggest that age, gender, time of day, care provider referral, patient diagnosis, type of hospital, mean of transportation, proximity to ED, and season were all independent predictors of non-urgent ED visits

Content Outline:

1. Background: This section will:
   1. Highlight the significance of the problem and its impact on the efficiency of EDs as urgent care facilities
   2. Discuss existing literature as it pertains to the use of EDs for non-urgent ED visits
   3. Present the problem statement to support the rationale for conducting this study
   4. Articulate the purpose of the Study

2. Methods and Procedures:
   1. Present the study design with rationale
   2. Describe the study sample and setting
   3. Explain data analysis procedures with justification

3. Results:
   1. Present the descriptive statistics of the sample characteristics
   2. Present the unadjusted univariate associations between each of the study variables and the outcome variable
   3. Present the adjusted predictors of non-urgent ED visits

4. Discussion
   1. General discussion of the most important study findings
2. Make recommendations for
   i. Research
   ii. Practice
3. Discuss the Study limitations
4. Summarize the main findings of the study and make conclusions

First Primary Presenting Author

**Primary Presenting Author**
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**Author Summary:** Maher El-Masri is a Professor and Research Chair at the University of Windsor, Faculty of Nursing with an extensive teaching and research background in research methodology, biostatistics, and clinical epidemiology. He is also the Editor-in-Chief of the Canadian Journal of Nursing Research (CJNR) and is a visiting scholar with the University of North Dakota - College of Nursing and Professional Disciplines since 2012.

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Author Summary: Abeer Omar’s research interest focuses primarily on health services research, activity restriction, and women’s health. She was a faculty member in Egypt since 1997. In 2013, she received her Ph.D. in nursing from Case Western Reserve University, Ohio, USA, which followed by a postdoctoral fellowship at the University of Windsor, Ontario. During her research educator position at St. Clair College, Abeer has developed an internal grant and scoring system.