

## Evaluation of the relationship between drugs' safety competence and Medication Administration Error Perceptions in Nurses working in medical education centers of Ardabil University of Medical Sciences in 2023

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### Abstract

**Aims:** The present study aimed to Evaluate of relationship between drugs' safety competence and Medication Administration Error Perceptions in clinical nurses who are working in Nurses working in medical education centers of Ardabil University of Medical Sciences in 2023

**Background:** The first and most important aim of a medical facility, as in the Nightingale pledge, is to not harm patients and protect their safety in the first place. One of the major threats to patient safety is drug-related errors.

**Methods:** This correlational study was conducted in Ardabil, northwest of Iran, in 2023. In these 300 nurses have been categorized by a proportional stratified sampling method. For data collection, we used the Bijani et al(2023) Persian version of the medication safety competence Questionnaire and the Wakefield et all (2005) Medication Administration Error Perceptions Questionnaire".The collected data were analyzed in SPSS software (26) using descriptive statistics, independent t-test, analysis of variance, Pearson correlation coefficients, and linear regression model.

**Results:** The results revealed that the drug safety competencies in Nurses (77%) and Medication Administration Error Perceptions in nurses (96%) were at a moderate level. The mean nurses' drug safety competence and Medication Administration Error Perceptions were reported ( $294.22 \pm 26.61$ ) and ( $135.48 \pm 15.14$ ) and this difference was statistically significant ( $P < 0.001$ ). There was a positive and significant correlation between drug safety competencies and Medication Administration Error Perceptions ( $P = 0.007$ ,  $r = 0.15$ ). A simple linear regression model showed that The field of "patient-centered medication management" of medication safety competency was a stronger predictor than other variables in medication error perception.



**Conclusion:** In the present study, nurses reported medication safety competence and perception of medication error at an average level. It is suggested that health policymakers and decision-makers take the necessary measures by holding consensus meetings and effective workshops to reduce medication errors and improve nurses' medication perception.

**Keywords:** drug safety competence, Medication Administration Error Perceptions, clinical nurses



## Introduction

The paper must not exceed 12 pages. Please use the following guidelines in preparing your full papers. If papers are not prepared according to the following guidelines they will be withdrawn from the conference program.

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All papers must be written in either English or Persian (Farsi). Paper will be presented in the language that it is written.

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Equations start from the far left of the column and numbered consecutively. The equation numbers must be bracketed and placed opposite to the equation on the far right of the line in that column.

$$\sigma_r = \frac{E}{1-\nu^2} (\epsilon_r + \nu \epsilon_\theta - (1-\nu) \alpha \Delta T) \quad (1)$$

## Tables, Figures and Photographs

Tables must be numbered and the title of the table must be placed on the top of the table with the footnotes on the bottom. Tables must appear where (or as close as to) they are first mentioned in the text. They must be referred in the text as "Table 1".

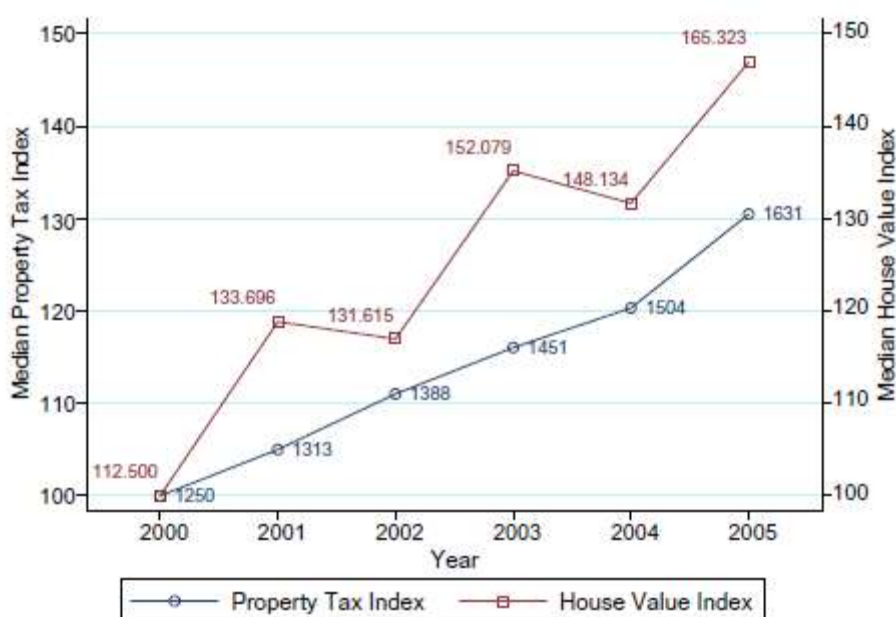
Figures must be numbered and the caption of the figure must come at the bottom of the figure. All the legends and the numerical values on the axes of the curves must be clear and readable. Figures must appear where (or as close as to) they are first mentioned in the text. They must be referred in the text as "Figure 1".

Photographs must original and follow 2 above for numbering and captions.

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**Table 1-major cities on the 21 routes to london**

Route number	City 1	City 2	City 3	City 4	City 5	City 6
1	Halifax	Sheffield	Nottingham	Bedford		
2	Plymouth	Exeter	Salisbury			
3	Tiverton	Taunton	Frome			
4	Bristol	Bath	Reading			
5	Southampton	Winchester				
6	Portsmouth	Chichester				
7	Canterbury	Rochester				
8	Yarmouth	Ipswich	Colchester			
9	Norwich	Bury				
10	King's Lynn	Ely	Cambridge			
11	Berwick	Newcastle	South Shields	Sunderland	Durham	
12	Bradford	Leeds				
13	Whitby	Scarborough	York			
14	Manchester	Derby	Northampton	Leicester		
15	Hereford	Gloucester	Cirencester			
16	Beverley	Hull	Lincoln	Boston		
17	Whitehaven	Liverpool	Macclesfield	Lancaster	Carlisle	Kendal
18	Shrewsbury	Birmingham	Wolverhampton	Coventry	Dudley	
19	Worcester	Oxford				
20	Kidderminster	Warwick	Banbury			
21	Chester	Lichfield	Coventry			



**Figure (1) median property taxes and house value in the united states, 2000-2005**

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- [1] Assembly Jobs, Economic Development, and the Economy Committee, 2006. 20 Years of California Enterprise Zones: A Review and Prospectus, Sacramento, California, April 12, 2006.
- [2] Timoshenko, S.P. and Woinowsky-Krieger, S., 1959, *Theory of Plates and Shells*, New York: McGraw-Hill Book Company.
- [3] Billings, Stephen, 2009. Do enterprise zones work? An analysis at the borders. *Public Finance Review* 37 (1), 68–93.