Emergency Healthcare Provider Wait Time before Patient Discharge after Opioid Administration: A Gender Analysis

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Emergency Healthcare Provider Wait Time before Patient Discharge after Opioid Administration: A Gender Analysis

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GENDER DISPARITIES

Past Studies Suggest that Female Medical Providers:
- Have longer appointments
- May possess more empathy for patients
- Focus on preventative care
- Administer less opioids in the emergency department

While Male Providers:
- Devote more time to taking a medical history
- Administer more opioids in the emergency department

THE “OPIOID EPIDEMIC”

- The number of nationwide deaths from prescription opioid overdose quadrupled between 1999 and 2010
- Emergency healthcare providers prescribe about 25% of all opioid analgesics in the US
- Between 2001 and 2010 there was a 49% increase in the percentage of emergency room patients that were prescribed an opioid
- No official guidelines exist for the discharging of emergency department patients after opioid administration

METHODS

Emergency healthcare providers from the Lehigh Valley Health Network were sent a multiple-choice survey which asked each provider how long they wait to discharge a patient from the ER after the administration of different opioids.

40 survey responses (28 female, 12 male) were analyzed.

A Chi Squared test of independence was performed for each of the six questions with respect to provider gender.

RESULTS

![Graph showing Difference in Provider Wait Time before Patient Discharge after the Administration of Intravenous Morphine]

Each of the six analyzed variables demonstrated a pattern similar to Intravenous Morphine; female providers showed a slight preference for a longer wait time.

<table>
<thead>
<tr>
<th>Question</th>
<th>Opioid of Interest</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intramuscular Hydromorphone</td>
<td>0.7480727</td>
</tr>
<tr>
<td>2</td>
<td>Intravenous Hydromorphone</td>
<td>0.3976212</td>
</tr>
<tr>
<td>3</td>
<td>Intramuscular Morphine</td>
<td>0.826746</td>
</tr>
<tr>
<td>4</td>
<td>Intravenous Morphine</td>
<td>0.3702678</td>
</tr>
<tr>
<td>5</td>
<td>Intravenous Fentanyl</td>
<td>0.7255288</td>
</tr>
<tr>
<td>6</td>
<td>Oral Opioids or Opiates</td>
<td>0.3895142</td>
</tr>
</tbody>
</table>

The relationship between provider gender and time before discharge after opioid administration was not statistically significant (p < 0.05) for any of the analyzed opioids.

DISCUSSION

Female emergency healthcare providers reported waiting longer than male providers to discharge a patient after opioid administration for each of the six opioid treatments. However, the gender disparities were not statistically significant for any of the six survey questions. Though this analysis failed to reject the null hypothesis, it calls for the exploration of the emergent pattern reported by the data.

The experiment could be repeated with the following changes:
- Utilize a larger sample size
- Include data from multiple institutions
- Perform a more rigorous statistical analysis

CONCLUSION

This study found no statistically significant difference between the practices of male and female emergency healthcare providers. Further research must be done to determine if female emergency healthcare providers elect to keep patients in the emergency room significantly longer after opioid administration.

REFERENCES:


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