INTRODUCTION

- In the last decade many advances in HIV therapy have been made.
- Introduction of newer classes of drugs and availability of combination pills have made possible to treat resistant and noncompliant patients respectively (1).
- With the introduction of safer antiretrovirals; treatment guidelines were relaxed from treating patients with CD4 < 200 to virtually treat all HIV patients (2).
- The clinical impact of these advances on Emergency room (ER) visits, hospitalization and in-hospital mortality rates due to HIV is unclear.
- This study was done to determine the change in trend of ER visits and hospitalization from 2006-11 due to HIV.

METHODS

- We queried Nationwide Emergency Department Sample data for all the patient visits with first listed diagnosis of HIV.
- We used Clinical classification software code 5, corresponding to International Classification Code 9 codes of 042, 042.0, 042.1, 042.2, 042.9, 043.0, 043.1, 043.2, 043.3, 043.9, 044.0, 044.9, 079.53, 279.10, 279.19, 795.71, 79.58 and V08.
- Data was extracted for the years 2006 to 2011. SPSS was used for statistical analysis and p<0.05 considered significant for the purpose of this study.

RESULTS

- We identified total of 379,332 Emergency Department (ED) visits with first listed diagnosis of HIV from 2006-11.
- 78.36% patients were admitted to same hospital from ER visit.
- In-hospital mortality during stay was 6.66%.
- Rate of patient visits to ED for first listed diagnosis of HIV decreased from 25.4 per 100,000 persons in 2006 to 15.7 per 100,000 in 2011.
- Hospital admission rates for ED visits declined from 81.28% to 72.25% (p<0.05).
- In-hospital mortality for these admissions declined from 7.03% to 6.09% (p<0.05)

DISCUSSION

- Our study reveals that ER visits, hospitalization and in-hospital mortality from HIV has decreased significantly from 2006-11.
- Still rate of hospitalization remains high with 3 out of 4 patients being admitted to the hospital with 6% mortality compared to national average of in-hospital mortality of 0.6% for Diabetes mellitus and 5% for myocardial infarction.
- It indicates there is still large unmet need for interventions in managements of HIV to reduce burden on healthcare.

REFERENCE


Table 1. Depicting trend of ED visits, admission rate and in-hospital mortality with first listed diagnosis of HIV

<table>
<thead>
<tr>
<th>HIV infection</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of visits</td>
<td>75,898</td>
<td>72,104</td>
<td>65,058</td>
<td>61,652</td>
<td>55,732</td>
<td>48,878</td>
<td>379,332</td>
</tr>
<tr>
<td>Rate of visits per 100,000 persons</td>
<td>25.4</td>
<td>23.9</td>
<td>21.4</td>
<td>20.1</td>
<td>18</td>
<td>15.7</td>
<td></td>
</tr>
<tr>
<td>Died during hospital stay</td>
<td>4.337 (7.03%)</td>
<td>3.887 (6.77%)</td>
<td>3.592 (6.87%)</td>
<td>3.227 (6.75%)</td>
<td>2.592 (6.07%)</td>
<td>2.150 (6.09%)</td>
<td>19,785 (6.68%)</td>
</tr>
</tbody>
</table>

Table 2. Depicting trend of ED visits, hospitalizations and in-hospital mortality with first listed diagnosis under HIV

Trend of ED visits, hospitalizations and in-hospital mortality from HIV

Rate of visits per 100,000 persons

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