Heart Block: An Educational Program to Improve Recognition and Understanding
Kayla Barton, RN, Cassandra Sklenka, RN, Autumn Edwards, RN

Background
- Patient outcomes are correlated with RN’s ability to recognize lethal rhythms and how to treat them
- Continuous education for RNs throughout their career can influence and improve timeliness of interventions
- When heart block goes undetected in patients, it can lead to sudden cardiac death which can be prevented if interventions are introduced in time

Practice Change
Increase RN’s knowledge of heart block including causes and treatment through posters and handouts to increase the timeliness of response time to improve patient outcome

Methods
- Administered anonymous paper per surveys to RN’s
- Presented educational information about heart block individually through handouts and posters
- Administered anonymous paper post surveys directly after educational handouts

Measures and Results

**Heart Block Questionnaire**

1.) PR intervals are constant in first-degree AV block?
2.) PR intervals get longer before a QRS is dropped in second-degree type II AV block?
3.) Wenckebach block is a nickname for second-degree type I AV block?
4.) The QRS complex frequency is less than the P wave frequency in a Wenckebach block?
5.) Most patients with a first-degree heart block are treated?
6.) Patients with Mobitz type II block (second-degree type II AV block) drop a QRS regularly?
7.) Second-degree type II AV block can lead to a 3rd degree block?
8.) The PR interval needs to be over .24 seconds to be considered a first-degree AV block?
9.) The R-R interval in third-degree AV block is constant?
10.) Second-degree type I AV block is often referred to as a 2:1 or 3:1 block depending on the ratio of P waves to each QRS complex?

**Results**

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<thead>
<tr>
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<th>Average Score</th>
<th>Sample Size</th>
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<tbody>
<tr>
<td>Pre-survey</td>
<td>80%</td>
<td>9</td>
</tr>
<tr>
<td>Post-Survey</td>
<td>90%</td>
<td>3</td>
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Summary/Discussion
- The pretest was handed to coworkers to fill out before they received the informational packet to evaluate prior knowledge and knowledge learned
- Feedback received from the heart block educational packet was:
  - “I really liked that packet as I feel that heart block’s are rhythms we all struggle with as there are so many and first degree can sometimes go undetected”
  - “These questions really make you think about the rhythm itself so it sticks in your mind better”
  - “The packet was really informative and the rhymes help the different rhythms really stick in your brain. I really feel as though I can better differentiate heart block now”

Conclusion
- Understanding of different types of heart block is more readily understood with the rhyming tool handed out to cardiac nurses
- Nurses would like our educational tool left by monitors to refer to in times of need for clarification.