Introduction:
Mobile phones (MP) of health care workers (HCWs) could be colonized by pathogenic bacteria. It can be a vector of drug resistant bacteria and could increase nosocomial infections. The aim of this study is to evaluate the prevalence of MP bacterial colonization in the adult intensive care unit (AICU), pediatric intensive care unit (PICU) and operating room (OR) in a tertiary level hospital.

Methods:
Sixty samples were collected from AICU (n=25), PICU (n=15) and OR (n=20) during August to September 2017. Samples were randomly selected and taken at the end of the HCWs duty with a sterile swab covering all MP surfaces. The inoculation was made into blood sheep and eosyn methylene blue agar for culture. Isolated bacteria were identified according to standard microbiological techniques. Antibiotic sensitivity testing was performed using disc diffusion method.

Results:
Overall MP bacterial colonization rate was 95%. Main results are detailed in table 1. Most common non pathogenic bacteria was Staphylococcus epidermidis n=18 (90%). Isolated pathogenic bacteria were Meticillin-susceptible Staphylococcus aureus n=14 (38%), Meticillin-resistant Staphylococcus aureus n=10 (27%), resistant Staphylococcus epidermidis n=4 (11%), Acinetobacter baumanni n=4 (11%), Klebsiella pneumoniae n=4 (11%) and resistant Acinetobacter baumanni n=1 (2%). No significant difference was found in colonization rates of pathogenic bacteria between MP with case n=35 (59%) versus MP without case n=25 (41%) (p< .753).

Conclusion:
We found high rates of MP colonization with pathogenic bacteria. An educational program is necessary to reduce the contamination and transmission of these high risk microorganisms.

References:

<table>
<thead>
<tr>
<th>Department</th>
<th>Non pathogenic bacteria</th>
<th>Pathogenic bacteria</th>
<th>Pathogenic bacteria</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Non drug resistant</td>
<td>Drug resistant</td>
<td></td>
</tr>
<tr>
<td>AICU</td>
<td>5 (20%)</td>
<td>8 (32%)</td>
<td>9 (36%)</td>
<td>3 (12%)</td>
</tr>
<tr>
<td>PICU</td>
<td>8 (54%)</td>
<td>4 (26%)</td>
<td>3 (20%)</td>
<td>-</td>
</tr>
<tr>
<td>OR</td>
<td>7 (35%)</td>
<td>10 (50%)</td>
<td>3 (15%)</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>20 (33%)</td>
<td>22 (37%)</td>
<td>15 (25%)</td>
<td>3 (5%)</td>
</tr>
</tbody>
</table>

Colonization rates per department and subtype of isolated bacteria