IPAC Challenges in Emergency Services (ES)

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So Do They…?

- Wear the wrong PPE?
- Wear too much PPE?
- Keep their PPE on all the time?
IPAC in ES is Challenging!

- Incomplete (or incorrect) dispatch info
- Work Environment
- PPE
- Policy and Procedures
- Knowledge gaps
It’s the nature of the job!
ES call environments can be:

- Unpredictable
- Uncomfortable
IPAC training in ES is:

- Not consistent
- Not necessarily a regular part of training
- Not necessarily a priority
Unpredictable
Unpredictable
Uncomfortable
Uncomfortable
Uncomfortable
Unpredictable and Uncomfortable work environments

Can make IPAC choices difficult
For example: Use of PPE may look wrong but…
Personal Protective Equipment is:

- Not designed for pre-hospital care
Personal Protective Equipment is:

- Meant to be put on before patient contact as per Routine Practices
- Required to be worn as per internal policies and procedures
- Single-use only

However...
How does this look:
How does this look:
Compared to this?
PPE use is also impacted by IPAC training

- Knowledge of IPAC is inconsistent
- Research shows knowledge gaps
- However not a lot of research in IPAC and emergency services has been done
For example:


For example:


For example:

EVALUATING IPAC AND PARAMEDICINE IN PEEL:
Using an American Survey for Canadian Results.

MAY 2010

Background:

The 2007 Ontario Ambulance Standards requires all Ontario-based paramedics to be able to apply Infection Prevention and Control (IPAC) knowledge in order to protect patient and paramedic safety. Currently in the Region of Peel, there are 384 paramedics who respond to approximately 80,000 calls for service per year, which result in approximately 50,000 transports of patients to hospital.

While IPAC has been a priority in Peel Health Services since SARS in 2003, understanding and confidence of Peel's paramedics concerning application of IPAC had not been evaluated. As well, the effect of working during SARS, applying IPAC principles was unknown.

Studies have found that while paramedics were aware of IPAC principles, application was inconsistent, which has been attributed to the need for additional training. The survey delivered to American paramedics also found that "existing knowledge regarding infection prevention and control among medical first responders." All new recruits were being taught IPAC principles as specified by the Provincial Disease Advisory Committee (PIDAC) by 2009. In order to evaluate Peel Paramedics' knowledge of IPAC, a survey was administered to the paramedics during continuing medical education (CME) in the fall of 2009.

Methods:

The survey used by Eisinger et al was adapted (with permission) to reflect the knowledge and practices of Ontario Paramedics. This survey was distributed to both new and experienced paramedics as a requirement to participating in CME sessions held in fall 2009.

Specific questions to be answered by this survey included:

1. Was working as a paramedic during SARS associated with lower confidence when applying IPAC principles, including selection of PPE?
2. Did receiving new recruit training result in higher confidence when applying selection of PPE?
3. Did rating oneself as ‘very confident’ or ‘confident’ when applying IPAC provide a higher proportion of correct answers to questions on IPAC knowledge and application?

All analyses were conducted using SPSS software (version 17.0).

Results:

SARS

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Yes (%)</th>
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<tbody>
<tr>
<td>Vomiting and Diarrhea</td>
<td>2.99%</td>
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Discussion:

Understanding and confidence of paramedics' knowledge or confidence when applying IPAC principles varies among regions. A lower proportion of paramedics may not have received appropriate training and on the survey may have introduced a bias in the results. The studies by both Eisinger et al. and Harris and NicolaI identified the need for paramedics to receive further IPAC education. While those studies were based on American emergency medical services, the same conclusion may be drawn from the survey results for Peel Regional Paramedic Services. The capacity to turn IPAC knowledge into practice requires further support and investment.
Conclusion

- Applying IPAC principles is hard in pre-hospital environments
- PPE is not designed for outside use
- Education focusses on the job, not IPAC
- People making the IPAC rules don’t know this
Question for you:

- How will this presentation change your interaction with your emergency services?
Questions for me?

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