Challenges and Opportunities of CME Program in Korea

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Current Status in Korea

- Continuous educations
  - Formal
    - Refresher course (Korean emergency medical technician association)
    - EMS provider training course (Fire & Disaster headquarters)
  - Informal
    - Graduate school
    - Symposium/Conference
    - Workshop
    - etc.

- Transition point
  - Scope of Practice ↑ -> credentialing by way of continuous medical education
Transition challenges

1. Sharing the concept of certification/credentialing
2. Scope of practices
3. Consistency of EMT’s competency
4. Systematic continuing education programs
5. Items of credentialing
6. Motive for excellence in education
1. Sharing the concept of certification/credentialing

- Certification/licensure
  - "Are you allowed to do it?", legal description
  - opportunity to seek employment for that level

- Credentialing
  - "Did you do the right thing and do it properly?"
  - allowance to perform to your level of training within an EMS practice

- Re-credentialing
  - maintain competency

Subject matter is similar, but their goals are not the same
eg. endotracheal intubation

- need 30 human intubations for proficiency of 90% for non-difficult airways
- success rate – related to recent intubation experience
- average intubation times : 1~2 / year (paramedic.US)
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<thead>
<tr>
<th>DAY 1</th>
<th>DAY 2</th>
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<tbody>
<tr>
<td>0900: BE, SP</td>
<td>0900: SP Airway Management</td>
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<td>Welcome</td>
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<td>0930-1030: SP</td>
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<td>1030-1045 Morning Tea</td>
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<td>1015: Morning Tea</td>
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<td>1045: BE/SP Practical T-Pod CT6 MRD I Gel</td>
<td>Scenario Assessment Core Skills Assessment</td>
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<td>1215-1300 Lunch</td>
<td>1300: SP Obstetrics</td>
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<td>1300: SP Aged Care Themes</td>
<td>1345 BE Obstetrics</td>
<td>1300 Core Skills Assessments Scenario Assessment</td>
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<td>1330: BE History Taking</td>
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<td>1400-1415 Arvo Tea</td>
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<tr>
<td>1415-1530 BE</td>
<td>1445-1545 SP</td>
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<tr>
<td>Documentation</td>
<td>Severe Behavioural Disturbances Droperidol</td>
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</table>
- Education
  - Trained to Do

- Certification (Licensure)
  - Scope of practice

- Credentialing
  - Permitted by medical director in EMS

Modified from National EMS scope of practice model. NHTSA.US
• Health care provider may only perform a skill or role for which that person is:
  • educated
  • certified/licensed
  • credentialed

Diagram: Modified from National EMS scope of practice model. NHTSA US
2. Scope of practice
- regulation of emergency medical service

- EMT Level 1 (regulation of
  - airway maintenance (airway, LMA, endotracheal tube) in CPR
  - access IV line
  - artificial ventilation
  - medication
    - glucose in hypoglycemic coma
    - NTG (SL)
    - fluid resuscitation in shock
    - bronchodilator inhalation in asthma exacerbation
  - Including SOP for EMT Level 2
- EMT Level 2
  - foreign body removal in oral cavity
  - BLS
  - supplemental oxygen administration
  - splint, spinal motion restriction
  - control external bleeding, wound care
  - check vital signs
  - MAST
  - AED
  - NTG (SL), bronchodilator inhalation in asthma exacerbation
    (patient possessions only)
- Mandate credentialing
  - Endotracheal intubation using laryngoscopy, extraglottic airway, video laryngoscopy
  - Ventilation support using mechanical ventilator, automatic transport ventilator, PEEP
  - Capnography
  - Recording & transmitting 12-leads ECG
  - Manual defibrillator
  - Pelvic sling/binder
  - bleeding control using hemostatic agents/tourniquet
- Access IV/Io for fluid and drug administration
  - oral: aspirin, NSAID, NTG (SL)
  - intravenous: epinephrine, amiodarone (cardiac arrest), N/S, lactate ringer, glucose, antihistamine, NSAID
  - intraosseous: epinephrine (failed IV access)
3. Inconsistency of EMT’s competency

- Require
  - Individual based approach for educatee
    - Self directed needs, interest
    - Level of competency
  - Establishing educational standardization for educator
### Clinical practice in hospital I – Total score

<p>| 제 1급 응급구조사 임상수련과정 종합성적 |
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4. Systematic continuing education programs

- System based approach
  - clear up goals, subject
  - comprehensive
  - virtuous cycle

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<th>Period</th>
<th>Participants</th>
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<tr>
<td>1</td>
<td>Training for EMT level 2 test</td>
<td>9 weeks</td>
<td>newly recruited fire fighters</td>
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<td></td>
<td></td>
<td>3 years</td>
<td></td>
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<td>2</td>
<td>Training for EMT level 1 test</td>
<td>4 weeks</td>
<td>3 years' experience as EMT level 2</td>
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<td>self e-learning</td>
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<td>3</td>
<td>Clinical practice in hospital I</td>
<td>9 weeks</td>
<td>EMT level 1</td>
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<td></td>
<td></td>
<td></td>
<td>• priority</td>
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<td>• long overdue training</td>
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<td>• no clinical experience in hospital</td>
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<td>4</td>
<td>Intensified training for EMT</td>
<td>1 week</td>
<td>Completed clinical practice in hospital I</td>
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<td>Intensified skill drill</td>
<td>1 week</td>
<td>Completed clinical practice in hospital I and</td>
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<td>intensified training for EMT</td>
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<td>6</td>
<td>Clinical practice in hospital II</td>
<td>4 weeks</td>
<td>3 years passed from latest intensified skill</td>
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<td>8</td>
<td>EMT Instructor course II</td>
<td>1 week</td>
<td>Completed EMT Instructor course</td>
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5. Items of credentialing – new scope of practice

- Mandate credentialing
  - Endotracheal intubation using laryngoscopy, extraglottic airway, video laryngoscopy
  - Ventilation support using mechanical ventilator, automatic transport ventilator, PEEP
  - Capnography
  - Recording & transmitting 12-leads ECG
  - Manual defibrillator
  - Pelvic sling/binder
  - Bleeding control using hemostatic agents/tourniquet
Access IV/Io for fluid and drug administration

- oral: aspirin, NSAID, NTG (SL)
- intravenous: epinephrine, amiodarone (cardiac arrest), N/S, lactate ringer, glucose, antihistamine, NSAID
- intraosseous: epinephrine (failed IV access)
6. Motive for excellence in education

- Demand-driven education
  - avoid outcome based education
  - Reflect
    - Current clinical needs
    - Issues of the local EMS system

- Teachable moment
EMS medical error
- Clinical judgement: 54%
- Skill: 21%
- Medication error: 15%

Whether error-identifying skills were applied?


Educational Feedback

- Retrospective evaluation of prehospital care
- Patient’s course in hospital
- Decision-making error
- System process
Protocol based education
- Knowledge (+++)
- Skill (++)
- Decision-making (+)

College/University

EMS
- Practice
  - Decision-making (+++)

Trauma center
Emergency medical center
- Management/transport
- Educational feedback
- Bedside teaching

Teachable Moment

Graduate
- Search/Research/Evidence
  - Self-learning (+++)
  - keep up Knowledge (+++)

Self-learning (+++)
- keep up Knowledge (+++)
Crisis or Opportunity?

- CME challenges in Korea are along with:
  - transition to
    - New EMS education standards
    - New EMS scope of practice

- Opportunity for establishing a long term vision for the future of EMS in Korea
Thank you
감사합니다
ありがとうございます
谢谢