Deceased Organ Donation: A Survey of Canadian Intensivists

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Background and Methods
Introduction

- Last national survey of Canadian health care workers attitudes and behaviors in organ donation done in 2006
- Lack of information to guide researchers and policy makers around organ donation.
- Many potential areas of interest:
  - donor identification;
  - death determination;
  - consent discussions with family & SDMs.
Introduction

• Multiple areas of potential variation
  – Variable provincial legislation
  – **Who** approaches **whom when**
  – ODO, hospital networks, hospitals all have different practices and resources
Introduction

• Neurological death criteria
  – Still some disagreement between physicians;
  – Wide variations in policy and practice across hospitals and countries.

• Ancillary testing
  – Varying criteria and indications;
  – Varying practices despite recommended indications;
  – May undermine public or professional understanding and trust toward **neurological death determination (NDD)**.
Aim

To investigate beliefs and attitudes of Canadian intensive care physicians towards their practices regarding deceased donation.
Method: Cross-sectional survey of Canadian intensive care physicians

• **Standardized approach**: item generation and reduction using
  – Online modified Delphi methods;
  – Survey validation for clarity, redundancy and comprehensiveness;
  – Test–retest reliability assessments.

• **Sampling frame**:
  – All intensive care physicians that practice in an institution that provides care for potential organ donors.
Method: Cross-sectional survey of Canadian intensive care physicians

• **Intensivists identification (sampling frame):**
  – Canadian Blood Services;
  – Canadian Critical Care Society
  – List already built by researcher
  – Manual searches from publicly available sources.

• **Use of an online platform:** LimeSurvey
  – Two e-mail reminders

• **Analysis:**
  – Use of descriptive statistics to report survey responses.
Respondents
Results

- **Sample**: 529 intensive care physicians identified
- **Response rate**: 49.7% (263/529)
- **Completion rate**: 89.4% (235/263)
- 90% with an academic affiliation
Results: Population Characteristics (n=263)

<table>
<thead>
<tr>
<th>ICU Population</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>228 (86.7)</td>
</tr>
<tr>
<td>Pediatric</td>
<td>35 (13.3)</td>
</tr>
</tbody>
</table>
Results: Population Characteristics (n=263)

**NUMBER OF BEDS**

- **>15**: 32%
- **0 - 5**: 25%
- **6 - 10**: 25%
- **11 - 15**: 18%

**BASE SPECIALTY**

- **Medicine**: 52%
- **Anesthesia**: 19%
- **Pediatrics**: 12%
- **Surgical**: 9%
- **Emergency**: 5%
- **Other**: 3%
- **Other**: 3%
Results: Population Characteristics (n=263)

<table>
<thead>
<tr>
<th>Defined role as a donation specialist</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>58 (22.1)</td>
</tr>
<tr>
<td>No</td>
<td>205 (77.9)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physician defined role as a donation specialist in the institution</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>179 (68.1)</td>
</tr>
<tr>
<td>No</td>
<td>84 (31.9)</td>
</tr>
</tbody>
</table>
Neurological Death Determination
Results: Neurological Death Determination

Clinical evaluation is sufficient to declare death

- Inability to evaluate both oculocephalic and oculocaloric reflexes
- Inability to evaluate both upper limbs and lower limbs responses to stimulation
- High cervical spinal cord injury
- Spontaneous peripheral movements
- Peripheral movement to stimulation
- Less than 24 hours after anoxic brain injury
- 24 hours to 48 hours after anoxic brain injury
- 48 hours to 72 hours after anoxic brain injury

Clinical situation

- Yes
- No
- Don’t know
Results: Neurological Death Determination

An ancillary test should be conducted...

Clinical situation

- Always
- When a complete clinical evaluation is impossible
- Mechanism is anoxia
- Mechanism is traumatic brain injury
- Mechanism is ischemic stroke
- Mechanism is isolated brainstem injury
- Mechanism for brain injury is unclear
- Residual effect of sedative

% of total

Strongly Disagree Disagree Neutral Agree Strongly Agree
This test is useful to confirm the diagnosis of neurological death
Results: Neurological Death Determination

Use of ancillary tests...

Helps families to accept neurological death
Has not been validated to help declare death by neurological criteria is acceptable
Can confirm reliably that a patient is deceased when he/she is indeed deceased (sensitive)
Can confirm reliably that a patient is not deceased when he/she is indeed not deceased (specific)
Conclusion: Neurological Death Determination

- A minority of intensive care physicians did not consider ancillary tests to be mandatory, even in the presence of confounding factors or unknown brain injury.
- A majority of intensive care physicians believe that the ancillary tests are useful for NDD in certain circumstances.
- Isolated brainstem injury and unclear mechanisms are clinical scenarios in which a majority of intensivists believe an ancillary test should be conducted.
Conclusion: Neurological Death Determination

- A significant proportion of respondents considered several tests not currently recommended for NDD to be clinically useful;
- There is significant variability in the use, indications and interpretation of ancillary tests in Canada;
- Half believe ancillary tests help families accept NDD;
- This survey suggests that there is remaining equipoise regarding death determination and the use of ancillary tests in general
Consent for Deceased Donation
Family Override
Respecter la loi pour sauver des vies
Marie Annik Grégoire Professeure, Faculté de droit, U. de Montréal,
17 octobre 2018

Le don d’organes : voir au-delà des volontés individuelles ?

Organ donation: Beyond individual consent?

Louise Bernier

Evaluating the “family veto” of consent for organ donation

Maeghan Toews LLM, Timothy Caulfield LLM

1- Éthique et santé,(2018) 15, 142-151; 2 - CMAJ. 2016 Dec 6;188(17-18)
ACTION IN THE FACE OF FAMILY OVERRIDE

- WLST w/No Donation: 56%
- Continue w/Donation: 18%
- Ethics Consult: 16%
- Legal Opinion: 8%
- Other: 2%
Reasons to Respect Override

- 80.7% – Fear Loss of Public Trust in System
- 70.8% – Respect for Grief and Family Desires
- 58.6% – Fear of Legal Consequences
- 38.6% – Fear of Negative Media
- 0.8% – Personal Beliefs Against Donation
Physician Override
HAVE YOU CHOSEN NOT TO APPROACH A FAMILY TO DISCUSS DONATION

- Yes: 57%
- No: 43%
Reported Instances of Non-Approach

PERCENTAGE OF RESPONDENTS (N = 103)

- 1 to 2: 33
- 3 to 5: 40.8
- 6 to 10: 9.7
- > 10: 16.5
Reasons for Non-Approach

- 58.7% – Organ dysfunction that would have precluded donation
- 42.3% – Family Seemed too Distressed
- 38.5% – Medicolegal Conflict with the Family
- 28.8% – Family Desire to Leave the Unit
- 0% – Personally Held Belief Against Donation
Presumed Consent
Presumed Consent For Organ Donation

• Presumed consent has yielded mixed results
• Unlikely to increase donation rates without support of public and healthcare professionals
• Last Canadian survey of healthcare workers (2006):
  – 59% somewhat or strongly supported of presumed consent
Percentage of respondents in favor of a change to a presumed consent model by province.

- Disagree/Strongly Disagree
- Neutral
- Agree/Strongly Agree
Presumed Consent

- 55% – Supported change towards PC
- 70% – Think PC would increase donation rates
- 22% – Believe it would increase their family approach rate
Consent Conclusions

• Multiple opportunities for quality improvement, policy, and research
• Need to expand target population to other healthcare professionals and general public
• Need to correlate physician behaviors with family experience
Acknowledgements

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