Ethics in Medical Physics: the IAEA Perspective

AAPM/IAEA Joint Symposium 2021: Ethics in Practice

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Introduction

Existing IAEA reference to ethics for CQMPs

Lack of awareness on professional ethics and relevant E&T (professional symposia, TC projects, establishment of E&T programmes)
Instruments and Methods

Survey distributed March – Mid-April

20 questions

Distributed to a targeted 103 participants

Range of years of experience

All areas of MP specialization

All regions but not North America
Regions
Response Rate per Region

103 disseminated
42 respondents
42% response rate
Range of Years of Experience

<table>
<thead>
<tr>
<th>Range of Years</th>
<th>N of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5</td>
<td>6</td>
</tr>
<tr>
<td>5 - 10</td>
<td>4</td>
</tr>
<tr>
<td>10 - 20</td>
<td>14</td>
</tr>
<tr>
<td>20 - 30</td>
<td>9</td>
</tr>
<tr>
<td>&gt;30</td>
<td>7</td>
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</tbody>
</table>

42 answers
42% response rate
Specialty and Certification

81% CQMP in RT, 24% in NM, 31% DR

<table>
<thead>
<tr>
<th>Specialty Level</th>
<th>Percentage</th>
<th>N of Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>CQMP 3 specialties</td>
<td>10%</td>
<td>4</td>
</tr>
<tr>
<td>CQMP 2 specialties</td>
<td>17%</td>
<td>7</td>
</tr>
<tr>
<td>CQMP 1 specialty</td>
<td>74%</td>
<td>31</td>
</tr>
</tbody>
</table>

87% of certified work in MP specialty they are certified in.

39% of certified consider that with their certification they will be able to work in any other country/region.

42 survey respondents
Certification is typically national, or defined mechanisms are needed to allow validation of certification.
Need for E&T in Ethics

5. DID YOU RECEIVE ACADEMIC COURSES OR TRAINING ON PROFESSIONAL ETHICS?

- Academic education: should include professional and research ethics (90% Y)
- Clinical training: should include professional ethics (98% Y)

42 respondents
6. IS THERE A REQUIREMENT FOR YOU TO UNDERGO A CERTAIN AMOUNT OF CONTINUING PROFESSIONAL DEVELOPMENT (CPD) ACTIVITIES?

- Yes: 25 (60%)
- No: 17 (40%)

7. DID YOU UNDERGO ANY CPD ACTIVITIES IN PROFESSIONAL ETHICS?

- Yes: 12 (29%)
- No: 30 (71%)

Acquisition of competencies in professional ethics:

academic education, residency, CPD and professional experience

42 respondents
13. In your practice of CQMP, do you raise professional ethics issues?

12. In your practice of CQMP, are you confronted with dilemmas that pertain to professional ethics?

Efficacy of Remarks: > 50% remarks are taken into consideration and actions follow

42 overall respondents
# Experience and Awareness

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Avg Years of Experience</th>
<th>N Respondents</th>
<th>Max Years of Experience</th>
<th>Min Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>20</td>
<td>4</td>
<td>37</td>
<td>8</td>
</tr>
<tr>
<td>I don't know</td>
<td>12</td>
<td>2</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>Few times</td>
<td>16</td>
<td>23</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td>1-2 times per year</td>
<td>17</td>
<td>6</td>
<td>31</td>
<td>2</td>
</tr>
<tr>
<td>Monthly</td>
<td>15</td>
<td>3</td>
<td>32</td>
<td>2</td>
</tr>
<tr>
<td>Weekly</td>
<td>20</td>
<td>1</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Daily</td>
<td>16</td>
<td>3</td>
<td>23</td>
<td>8</td>
</tr>
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</table>
Decision Making Process

14. WHO HELPS YOU MAKE DECISIONS PERTAINING TO PROFESSIONAL ETHICAL ISSUES THAT YOU ENCOUNTER IN CLINICAL PRACTICE? (ALL THAT APPLY)

- Advice from Clinicians: 23
- Advice from other Healthcare professionals: 15
- Advice from Experts in Ethics: 10
- Advice from Professional Contacts: 14
- Not Involved in Ethical decision making: 9

42 overall respondents
**Decision Making Process**

16. WHAT INFORMS THE DECISIONS PERTAINING TO PROFESSIONAL ETHICAL ISSUES THAT YOU ENCOUNTER IN CLINICAL PRACTICE? (ALL THAT APPLY)

<table>
<thead>
<tr>
<th>Decision Factor</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Involved</td>
<td>10</td>
</tr>
<tr>
<td>Acad Education + Training</td>
<td>18</td>
</tr>
<tr>
<td>Self-Study</td>
<td>21</td>
</tr>
<tr>
<td>Constitution Country</td>
<td>8</td>
</tr>
<tr>
<td>Past Professional Experience</td>
<td>26</td>
</tr>
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</table>
11. Do you know where to find educational resources on professional ethics if needed?

- Yes: 25 (60%)
- No: 17 (40%)

Total answers: 42
Ethics in Practice

~40% has stored or transmitted patient information through online services

18. HAVE YOU EVER PERFORMED RESEARCH INVOLVING: (ALL THAT APPLY)

- Patient Information or images from another Centre: 18 respondents
- Equipment Imaging or Treatment: 34 respondents
- Info from Patient records or files: 24 respondents
- Patient Images: 27 respondents

38 respondents

~50% doesn’t consider ethical clearance or waiver necessary
Conclusions

- Answers Max N from Europe
- Range of years of experience and all MP specialties
- Little understanding of certification
- Disconnect between professional ethics and practice
- Advice from clinicians and healthcare professionals
- Ethical clearance processes not widespread
- Lack of specific education (all levels) in professional ethics
Thank you!

More information and material available on
https://www.iaea.org/
https://humanhealth.iaea.org