Key factors for effective multidisciplinary work in tumour boards linking team culture and communication to the perceived benefit for patients in cancer care.

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Introduction

➢ In Austria, **40,000 people** are diagnosed with **cancer** each year (expected to **double by 2040**)
(Statistik Austria, 2024; Wild et al., 2020).
   ➢ Cancer is increasingly becoming a chronic disease, resulting in more **cancer survivors**.

➢ The Austrian health system is **among the world leaders in treatment costs**, but the **outcome** of oncological care is **average for most entities** (Allemani et al., 2018; OECD, 2023).

➢ As demand in oncology grows, it becomes increasingly important to **use limited resources as effectively as possible** (Lamb et al., 2014; Soukup et al., 2020a; Soukup et al., 2020b).
   ➢ Consideration of the **quality of multidisciplinary teamwork** in cancer care
   ➢ Although much information is available on multidisciplinary teamwork in health care, **evidence of its quality in cancer care is still missing**.
Introduction

➢ The multidisciplinary approach suggests…

…improved communication and decision-making between health professionals.

…benefits for patients.

…high-quality cancer care and improved survival.

➢ Tumour boards (MDTs), are considered the gold standard in oncology (Kočo et al., 2022).

➢ Treatment recommendations in weekly meetings

➢ Discussion of every initial cancer diagnosis

➢ Mandatory disciplines: surgery, radiology, radiation, oncology and histology
Introduction

➢ The regular implementation of tumour boards requires a high commitment of human, financial, and time resources, which are then not available for routine operations (Winters et al., 2021).
   ➢ The benefits are sometimes controversial from a business and management perspective, particularly regarding effectiveness and efficiency (Engelhardt et al., 2021; Freytag et al., 2020).

➢ No clear link has been found between tumour board discussions and improved outcomes (Ali et al., 2023; Askelin et al., 2021; Kočo et al., 2021; Soukup et al., 2021).
   ➢ Evidence suggests that tumour boards do not always work optimally (Jalil et al., 2013; Lamb et al., 2013c; Walraven et al., 2023).

➢ Studies measuring the practical benefits of tumour boards in terms of effectiveness and efficiency using a mixed-methods design have not yet been conducted in Austria (Lumenta et al., 2019).
**Step 1**
Systematic Review

**Step 2**
Qualitative research:
Online interviews with tumour board members

**Step 3**
Quantitative research:
Online-survey/development and testing

Steps
- Further data collection
- Psychometric Analysis
- Publications
The Survey

➢ The Austrian Tumour Board Survey (ATS) was developed from October 2020 to date.
  ➢ 52 Items at a 5-point Likert scale and open questions for improvement strategies.

➢ Nine Dimensions and two outcome variables relating to MDTs in Austria:
  ➢ (1) structures and guidelines, (2) role at the MDT, (3) organization, (4) quality of presented information, (5) patient information, (6) decision-making, (7) teamwork and culture, (8) attendance, (9) documentation
  ➢ (1) Tumour boards result in better patient care (Outcome-Variable 1)
  ➢ (2) Perceived value of the tumour board for patient management (Outcome-Variable 2)

➢ Online-Survey with LimeSurvey (March-May 2022 (pilot) and January-August 2023
  ➢ 202 and 177 members of nine MDTs of an Austrian academic hospital.
  ➢ 117 and 81 participants answered the questions completely (response rate 58% and 45.7%).
Structures and guidelines

- Poor: 49%
- Sufficient: 14.8%
- Average: 29.6%
- Good: 30.9%
- Excellent: 19.8%

Role

- Poor: 6.2%
- Sufficient: 3.7%
- Average: 30.9%
- Good: 14.8%
- Excellent: 44.4%

Organisation

- Poor: 6.2%
- Sufficient: 18.5%
- Average: 35.8%
- Good: 25.9%
- Excellent: 13.6%

Quality of presented information

- Poor: 4.9%
- Sufficient: 12.3%
- Average: 38.3%
- Good: 32.1%
- Excellent: 12.3%

Patient information

- Poor: 3.7%
- Sufficient: 11.1%
- Average: 25.9%
- Good: 38.3%
- Excellent: 21.0%

Decision-making

- Poor: 16.0%
- Sufficient: 44.4%
- Average: 29.6%
- Good: 9.9%

Team culture and communication

- Poor: 7.4%
- Sufficient: 33.3%
- Average: 34.6%
- Good: 23.5%

Attendance

- Poor: 28.4%
- Sufficient: 32.1%
- Average: 25.9%
- Good: 11.1%
- Excellent: 2.5%

Documentation

- Poor: 21.0%
- Sufficient: 16.0%
- Average: 32.1%
- Good: 22.2%
- Excellent: 8.6%

n=81
Measures of location/ dispersion and Spearman correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>M (SD)</th>
<th>Md (IQA)</th>
<th>Team culture and communication</th>
<th>Tumour boards result in better patient care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team culture and communication</td>
<td>4.19 (.46)</td>
<td>3.75 (.62)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tumour boards result in better patient care</td>
<td>4.30 (.73)</td>
<td>4.00 (1.00)</td>
<td></td>
<td>.50**</td>
</tr>
<tr>
<td>Perceived value of the tumour board for patient management</td>
<td>4.22 (.87)</td>
<td>4.00 (1.00)</td>
<td>.54**</td>
<td>.66**</td>
</tr>
</tbody>
</table>

*Note.* Explanation of the abbreviations for the statistical key figures: *M* = mean; *SD* = standard deviation, *Md* = median and *IQA* = interquartile range. The asterisks (***) indicate that the correlations are significant (*p* < .001).
A positive team culture can lead to a more positive perception of the tumor board.
- The tumor board members make more effort to run the board efficiently.

If participants perceive the tumor board as a tool that contributes to better treatment, more time will be allocated to tumor board-related tasks.
- The tumor board is visited more conscientiously and is scheduled as a fixed date (enhancing attendance of mandatory disciplines).
- Results and patient information are more likely to be up-to-date (enhancing the quality of presented information).
- The documentation is carried out in more detail (enhancing the quality of documentation).
Outlook

➢ Further research is needed (limited sample size)
  ➢ To gain a deeper understanding of the teamwork processes in tumor boards.
  ➢ To confirm the assumptions made and to provide implications for practice.

➢ Validation of the developed questionnaire to drive a continuous improvement process in cancer care in Austria:
  ➢ Internal evaluation of structures, processes, and outcomes to identify areas for improvement per board
  ➢ Independent implementation of improvement potential by tumor board members
  ➢ Use of checklists and facilitated documentation to increase patient safety
Thank you for your attention!

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