

# CN61 - The role of oncology nurses in treatment-related adverse event management: an international online survey

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## BACKGROUND

- The continuing revolution in cancer care is paralleled by a growth in the range and complexity of treatment-related adverse events (TRAE)<sup>1</sup>
- There are calls for expanded roles for nurses in the management of TRAE in order to reduce iatrogenic harm<sup>2</sup>
- Though nurses are increasingly moving to the centre of TRAE management, there is relatively little research on the subject from their perspective

## OBJECTIVE

- We conducted an international online survey in order to assess nurses' perspectives on the management of TRAE and how it can be improved

## METHODS

- The survey was hosted on bespoke software (4C-Research) and was provided in English, German, French, Italian and Spanish
- The survey was designed by gastrointestinal (GI)-cancer specialist nurses and targeted cancer nurses with a particular focus on GI-cancer specialists
- Six broad categories of questions were covered:
  - respondent professional demographics
  - assessment of persons responsible for TRAE management
  - assessment of guidelines used in TRAE management
  - assessment of training and confidence in TRAE management
  - resources used to implement and improve TRAE management
  - suggestions to improve future TRAE management
- Dissemination was via:
  - social media platforms
  - the educational group GI Nurses CONNECT
  - databases provided by the medical education company COR2ED
  - professional nursing bodies

## RESULTS

### Demographics

- The survey was live between July 7<sup>th</sup> and August 12<sup>th</sup> 2021
- The majority of the 217 respondents were from the United States (n = 139; 64.1%), followed by Europe (n = 63; 29.0%), Central and South America (n = 10; 4.6%), and other countries (n = 6; 2.8%)
- College degrees or diplomas (n = 76; 35.0%) were the most common qualifications, followed by undergraduate degrees (n = 69; 31.8%), Masters degrees (n = 44; 20.3%), Technical degrees (n = 8; 3.7%) and other qualifications (n = 14; 6.5%)
- Most respondents worked with outpatients (n = 166; 76.5%) or inpatients (n = 44; 20.3%)
- Medical oncology and specialist cancer nursing were the most common roles (Figure 1A)
  - Almost half of respondents had been in their roles for more than 10 years (Figure 1B)
- Community oncology and cancer centres were the most common practice type (Figure 1C)
- Most nurses cared for more than 20 patients receiving cancer treatment per week (Figure 1D)
- In those respondents who treated GI cancers (89.4%; n = 194), 21.2% estimated that more than half of their patients had a GI cancer
- For nurses treating GI cancers:
  - 94.3% treated colorectal cancer
  - 83.5% treated gastroesophageal cancer
  - 79.4% treated liver cancer
  - 87.6% treated pancreatic cancer
  - 72.7% treated neuroendocrine cancers

Figure 1: Summary of responses by nursing role (A), time in role (B), practice type (C), and patients seen per week (D)

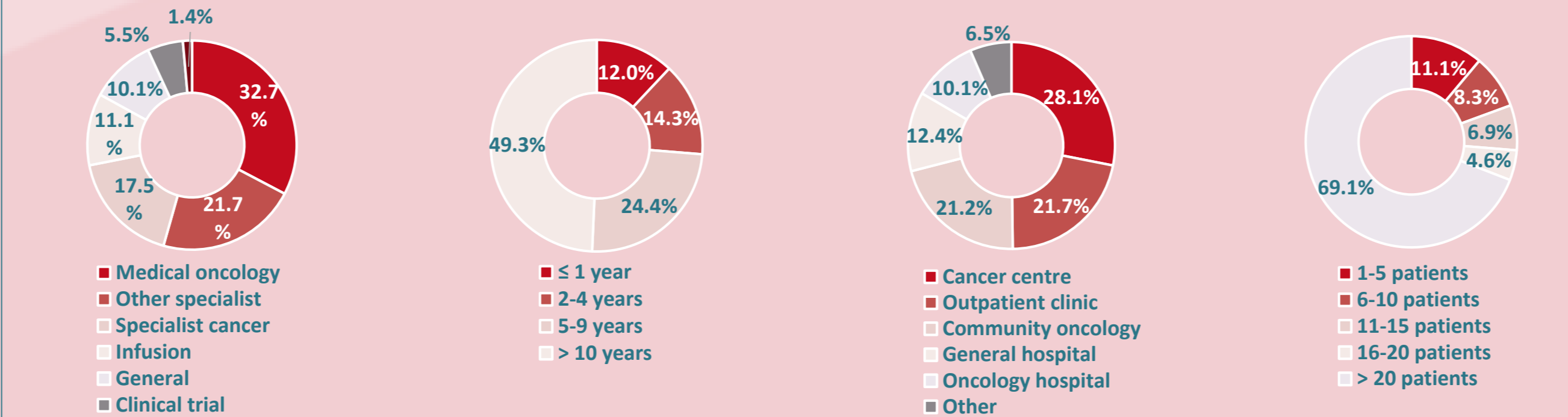


Figure 2: First point of contact for TRAE (A), who manages TRAE (B), hours of TRAE training/year (C), and confidence in managing TRAE (D)

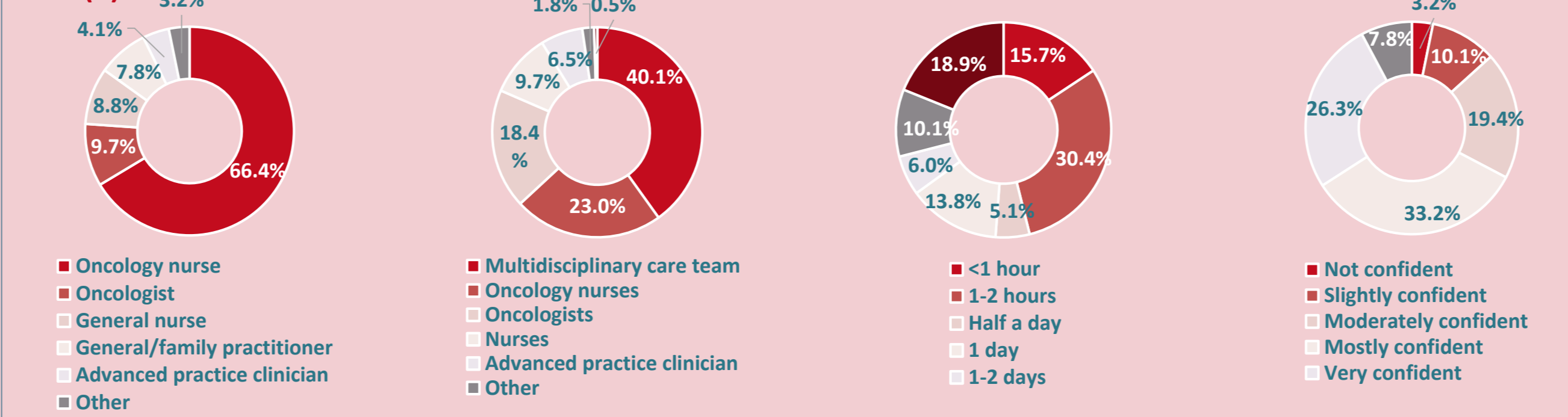


Figure 3: Sources of training for TRAE management (N = 176)

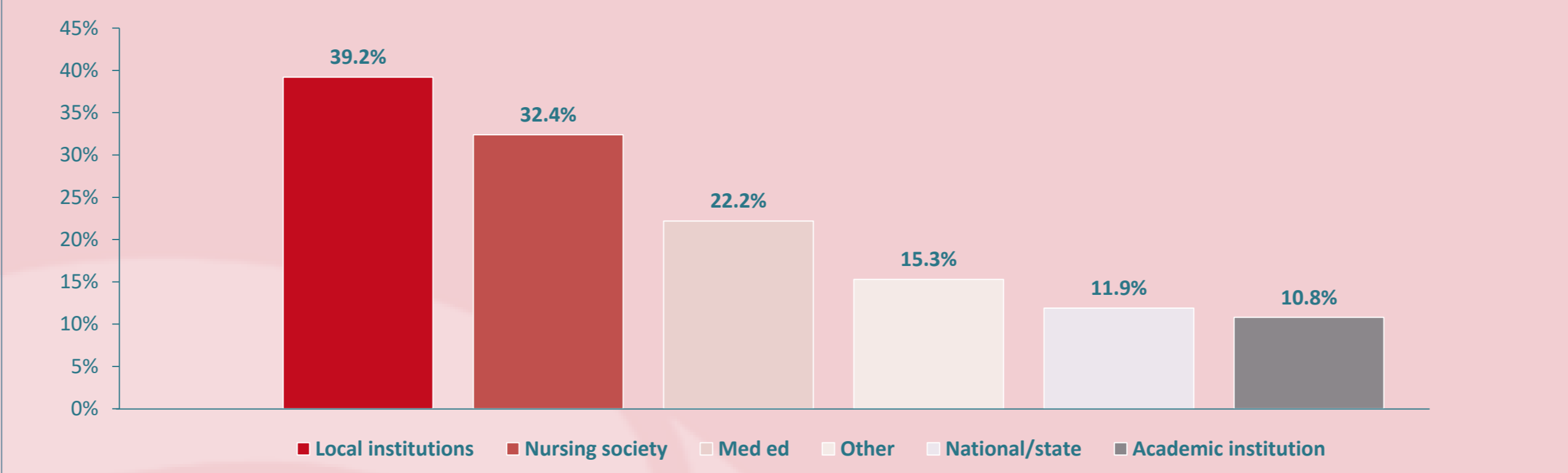


Figure 4: sources used to improve your knowledge of TRAE (N = 217)

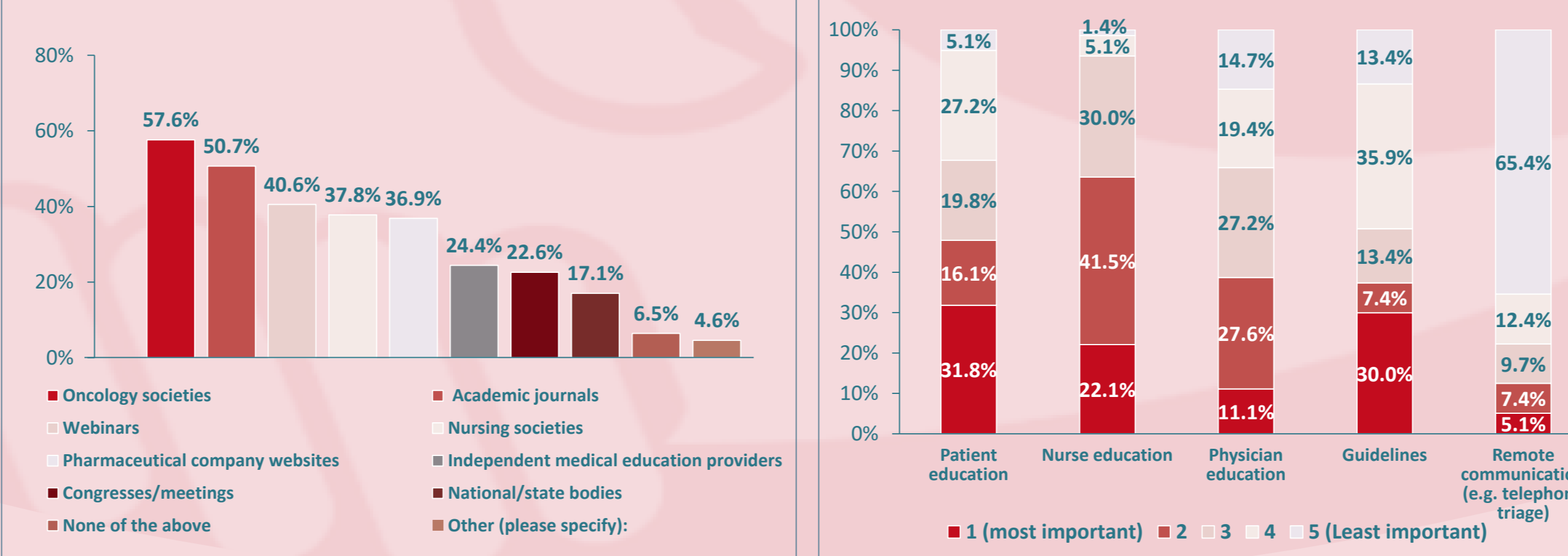
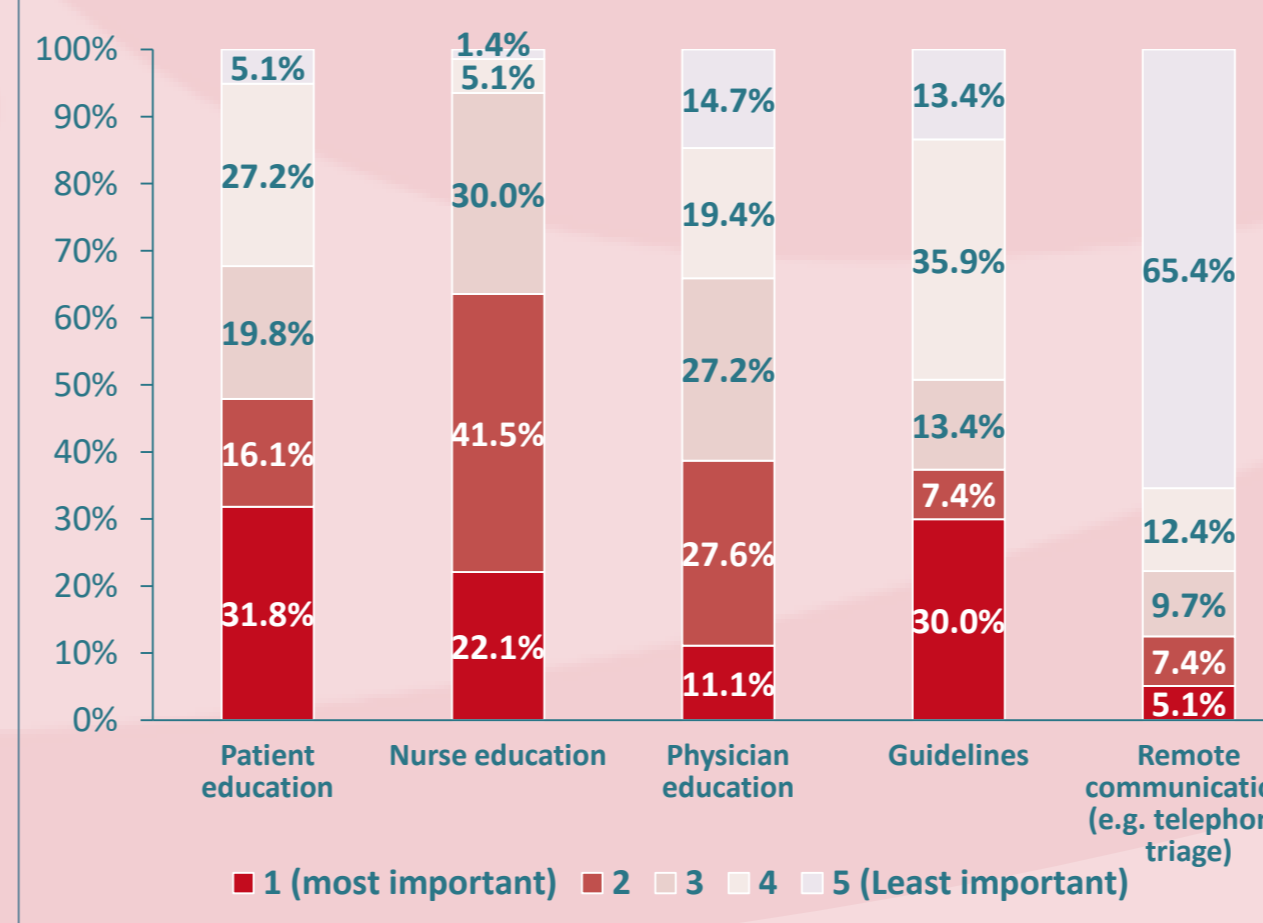


Figure 5: factors for improving TRAE management (n = 217)



## RESULTS

### TRAE management

- Oncology nurses were the first point of contact for patients who experienced a TRAE in most cases (Figure 2A)
- Multidisciplinary care teams and oncology nurses typically managed TRAE (Figure 2B)
- The majority of nurses who received training (81.1%; n = 176), had received 2 hours or less training in the past year (Figure 2C)
  - Close to a fifth of patients had no training in the past year (19.9%; n = 41)
  - Training was most commonly provided by local institutions or nursing societies (Figure 3)
- Approximately, two thirds of nurses were mostly, very, or completely confident in their ability to handle adverse events (Figure 2D)
  - Most TRAE were graded according to Common Terminology Criteria for Adverse Events (CTCAE) (n = 111; 51.2%), or via an institutional grading system (n = 35; 16.1%)
    - 33.2% (n = 72) of respondents did not know how TRAEs were graded
  - The majority of nurses (n = 191; 88.0%) had access to guidelines for TRAE management, 4.6% (n = 10) did not know whether they had access
    - TRAE guidelines were provided by oncology societies (n = 49; 25.7%), local institutions (n = 39; 20.4%), National or State bodies (n = 23; 12.0%), nursing societies (n = 21; 11.0%) and other sources (n = 13; 6.8%)
    - A large minority of respondents did not know the source of their guidelines (n = 43; 22.5%)
  - Of those nurses who had access to guidelines (n = 191; 88.0%), most reported their guidelines were structured according to TRAE type (n = 80; 41.9%) or by grade/severity (n = 49; 25.7%)
    - The remainder were arranged by either treatment type (n = 23; 12.0%), both treatment and tumour type (n = 10; 5.2%) or a combination of all of the above (n = 29; 15.2%)
- Academic journals and oncology societies were the most common sources used by nurses to improve their understanding of TRAE management (Figure 4)
- Patient and nurse education were seen as the most important factors for improving management of TRAE (Figure 5)
- During the pandemic, the following remote methods were used for communication:
  - Telephone consultation (n = 136; 62.7%)
  - Video consultation (n = 84; 38.7%)
  - Messaging (n = 29; 13.4%)
  - Telemedicine (n = 71; 32.7%)
  - E-mail (n = 68; 31.3%)
  - 20.3% (n = 44) of respondents did not use remote methods of communication

### Strengths and limitations

- This was an open online survey and there was no opportunity to verify the veracity of answers nor the identity of those filling out the survey
- The survey was drafted based on the knowledge of a highly experienced team of cancer nurses, rather than empirical research on the role of cancer nurses in TRAE management
- A large number of responses were received from a single professional body within Florida, USA, which may have skewed results towards typical practices therein

### Discussion and Conclusions

- Nurses are typically the first person contacted when reporting a TRAE
- The primary sources of nurse training in TRAE management were local institutions and oncology societies
- Outside resources, such as academic journals, nursing societies, and oncology societies contributed substantially to nurses' personal efforts to improve knowledge of TRAE
- The most important factor for improving TRAE management is in the education of the patient and family
  - Nurses remain the key source for patient education<sup>3</sup>
- We must continue to strengthen nurse education regarding TRAE to ensure patient understanding of their treatments

### Disclosures and acknowledgements

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