

# STANDARDISATION OF SYMPTOM MONITORING METHODS REQUIRED TO IMPROVE COLLABORATION IN MASCC SYMPTOM PROJECTS

Corina van den Hurk<sup>1</sup>, Michèle Brussé<sup>1</sup>, Darcy Burbage<sup>2</sup>, Marina Calamac<sup>3</sup>, Andreia Capela<sup>4</sup>, Annemarie Coolbrandt<sup>5</sup>, Raymond Chan<sup>6</sup>, Manuela Eicher<sup>7</sup>, Yannick Elshot<sup>8</sup>, Joel Epstein<sup>9</sup>, Greg Kotronoulas<sup>10</sup>, Marion Kuper-Hommel<sup>11</sup>, Helle Pappot<sup>12</sup>, Julie Ryan Wolf<sup>13</sup>, Penelope Schofield<sup>14</sup>, Ysabella van Sebille<sup>15</sup>, Iris Walraven<sup>16</sup>

¹Comprehensive Cancer Organisation the Netherlands, The Netherlands; ²Independent Oncology Clinical Nurse Specialist Consultant, Newark, USA; ³Institute for Oncology and Radiology of Serbia, Serbia; ⁴Centro Hospitalar Vila Nova de Gaia-Espinho, Portugal and Associação de Investigação de Cuidados de Suporte em Oncologia Portugal; ⁵University Hospitals Leuven, Belgium; ⁶Flinders University, Australia; ¹University of Lausanne and Lausanne University of Lausanne University of Hope Comprehensive Cancer Center and Cedars-Sinai Medical Center, USA; ¹Oschool of Medicine, Dentistry and Nursing and College of Medical, Veterinary and Life Sciences and University of Glasgow, UK; ¹¹Waikato District Health Board, New Zealand; ¹oschool of Copenhagen, Denmark; ¹oschool of North Australia; ¹oschool of North Australia; ¹oschool University of South Australia; ¹oschool University of South Australia; ¹oschool University, The Netherlands.

#### INTRODUCTION

- Patient-reported symptom monitoring is increasingly used in clinical practice to report a broad range of symptoms, to provide early recognition, enable earlier intervention and to assess patient outcome to improve health-related quality of life (HRQoL).
- Worldwide many initiatives exist to electronically monitor these symptoms during and after treatment, in studies but increasingly also in routine clinical care.
- However, there is no international consensus on core symptom subsets, introducing large variation in questionnaires and methods.
- A MASCC Working Group on symptom monitoring has started to explore possibilities for standardization of methods.

# **MATERIALS AND METHODS**

- An online survey was developed and send to 23 Working Group members.
- Available patient-reported symptom datasets were investigated
- The goal was to explore their currently used methods in studies investigating the use of electronically gathered patient-reported symptoms.

## **RESULTS**

- 16 Working Group members from 10 countries returned the survey (Australia, Belgium, Denmark, Netherlands, New Zealand, Portugal, Serbia, Switzerland, UK, USA)
- 12 Working Group members conducted/ are conducting symptorm monitoring studies involving patients with cancer. Sample sizes ranged from 30 to 841. The cancer types were: breast, head and neck, hematological, lung or any/several cancer types.
- Several symptom questionnaires were used in the studies (Table 1).
- Various HRQoL questionnaires were used in addition to symptom monitoring and these were cancer-, organ- and/or symptom specific.
  Also HRQoL surveys include symptom questioning.
- Priorities for the Working Group to improve symptom monitoring were mentioned in open questions (Table 2).

## DISCUSSION

- MASCC Working Group members use different methodologies for symptom monitoring, i.e. type of patient-reported questionnaires and frequencies.
- Standardization would allow pooling the symptom data and research e.g., creation of statistical and/or Artificial Intelligence models to predict symptom severity, trajectory, impact and outcomes of interventions.
- Another solution is mapping (i.e., transform concepts into a single code with a same/similar meaning) of separate questionnaires. However, different scales introduce loss of information.
  - Example: how to map PRO-CTCAE (severity: none, mild, moderate, severe, very severe) and ESAS (severity 0-10)?
- There is no insight in the use of symptom monitoring methods over the continents as only Working Group members from high income countries participated in the survey.

## CONCLUSION

"Standardisation of symptom monitoring methodologies would improve optimal use and sharing of data in collaborative MASCC projects"

Table 1 Symptom monitoring methods among studies of Working Group members

## Type of Symptom Questionnaire

- Patient-Reported Outcomes Common Terminology Criteria for Adverse Events (PRO-CTCAE)
- Daily Chemotherapy Toxicity self-Assessment questionnaire
- Symptom Inventory
- Edmonton Symptom Assessment System (ESAS)
- Problem checklist

# Symptom Questionnaire Frequency

Ranging from daily to 3-weekly

# Table 2 Ideas for collaborative projects

## Research topics

- Patient-Reported Outcomes related to:
  - Symptom severity and burden
  - Objective data collected using monitoring devices
  - Heath-related Quality of Life
  - Survival
  - Financial toxicity
- Patiënt engagement and (long-term) compliance

# Development

- Easily accessible digital tools for symptom monitoring
- Decision algorithms for health care professionals to respond to monitoring
- Prediction models for symptom evolution, longitudinal trends
- Integration of symptom reporting in daily clinical practice
- Symptom management integration in after care
- Position paper on implementation of symptom monitoring
- Recommendations on good clinical practice: quality, safety, interoperability

## References

#### Recent symptom monitoring publications with Study Group members involved

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Contact Corina van den Hurk PhD: C.vandenHurk@iknl.nl