

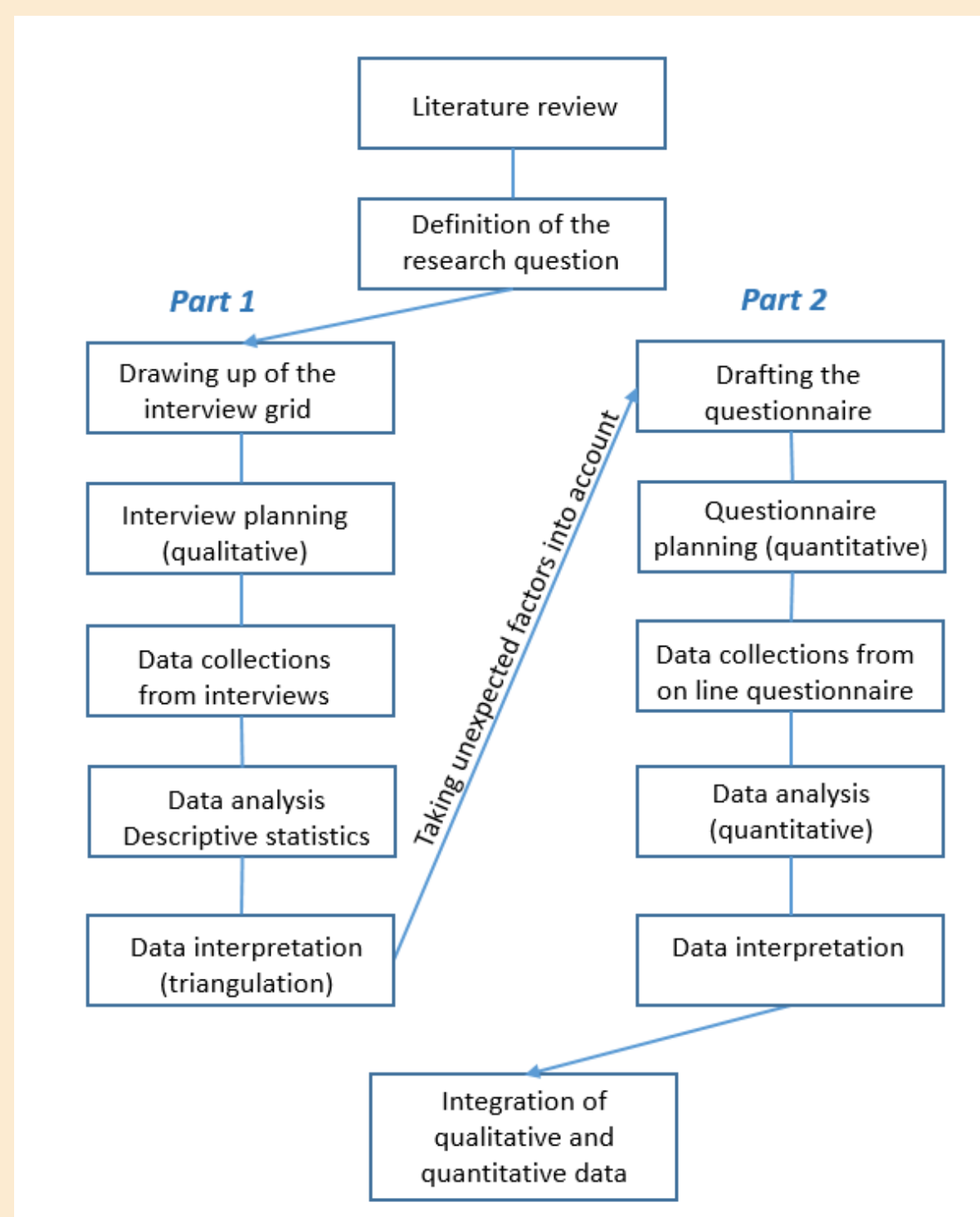
## INTRODUCTION

International recommendations have demonstrated the **need to integrate palliative care (PC) into oncology management at an early stage** (1), to improve patients' quality of life and even life expectancy (2). However, **the effective implementation of these recommendations on an international scale still seems difficult**. As example, the median follow-up time for oncology patients by a PC team is currently around 15 days (3). In order to bring objectivity and reproducibility in evaluating PC integration on an international scale, **Hui et al (4) have identified 13 criteria for assessing the level of integration of PC in oncology. Of these, 4 refer to the importance of training for oncologists.** At present, the training of French oncology residents falls far short of Hui's indicators: no obligation for oncology residents to undertake PC rotations, no mention of PC courses in the educational objectives of the national oncology program. The main aim of this study is therefore **to identify and assess the PC training needs of French oncology residents.**

## METHODS

This was a **descriptive, national, mixed-method, sequential study**, conducted in two phases, the first from November 2020 to June 2021, the second from January 2023 to December 2023.

### Study design:



- **Part 1: Semi-structured qualitative interviews**  
The COREQ criteria have been met.
  - ❑ **Participants:** French oncology residents were selected on a **voluntary basis**. Convenience sampling was carried out on a purposive basis.
  - ❑ **Interview method:** Individual interviews were conducted by a single researcher following an **interview guide**.
  - ❑ **Data analysis:** Three researchers participated in the data analysis, all trained in qualitative research. An **exhaustive triangulation** was carried out on the corpus of interviews.
- **Part 2: Quantitative questionnaire:**
  - ❑ **Participants:** All French residents currently undergoing **specialization in oncology (DES)** were included, i.e. 600 residents, spread over 5 promotions
  - ❑ **Questionnaire structure :** The questionnaire was composed of 31 questions, divided into 7 sections (section 1: socio-demographic data, section 2: practical experience in PC, section 3: additional specialized training in PC, section 4: theoretical background in PC, section 5: self-assessment of skills in PC and degree of acceptance to change in training, section 6: proposals for modification of theoretical training, section 7: proposals for modification of practical training).
  - ❑ **Data collection:** Data was collected by responding to the **questionnaire** carried out on the **online Lime Survey®** software.
  - ❑ **Questionnaire distribution:** Several dissemination axes were used : regional oncology networks, national oncology associations and the national college of oncology teachers.

## RESULTS

- **Part 1: Semi-structured qualitative interviews**
  - ❑ **Respondents characteristics:** Interviews stopped after 8. They were from 5 different regions; 5 were specialized in medical oncology, 1 in radiotherapy, 2 had not yet chosen; 2 were in their 1<sup>st</sup> year, the others at the end of their internship or even at the start of their assistantship; 3 had completed a semester in a PC Unit
  - ❑ **Main objective :** Needs in PC training are underpinned by the level of PC: **the least trained feel they need the least training experience in PC (P2: "I think that for an oncologist it's still okay because I have learned a lot but I would not mind doing 6 more months of palliative care") while those without experience feel relatively comfortable in their practice (P3: "I almost have the impression of having the level of a palliative care doctor than that of an oncologist")**
  - ❑ **Secondary objectives:**
    - The **lack of palliative culture** was illustrated by a **narrow view of PC definition reduced to the end of life** and by a non integrated and non collaborative vision between oncology and PC
    - **Communication and management of family meetings** were identified as the main training needs of residents. Symptoms management was a secondary need
    - Visibility and quantity of PC teaching during medical study seem to be the source of this lack of PC knowledge.
    - **Need for practice is more in demand than that of theory**
    - **Having a medical training in a PC unit was highlighted.** Added value of practical experience for residents who have worked in PC units

- **Part 2: Quantitative questionnaire**
  - ❑ **Participation rate and respondents characteristics:**

	Study participants (N= 132)	
Participation rate	132/600 (22%)	
Medical internship city	All of the 27 french cities	
Sex	Male	46 (35%)
	Female	86 (65%)
Medical Specialty	Medical Oncology	69 (52%)
	Radiotherapy	35 (27%)
	Undifferentiated	28 (21%)
Internship year	1st year	28 (21%)
	2d year	25 (19%)
	3d year	24 (18%)
	4th year	23 (17%)
	5th year	18 (14%)
Research year	14 (11%)	
  - ❑ **Main objective:** **88% (n=126) of the residents interviewed requested an improvement in their training in PC.**
  - ❑ **Secondary objectives:**
    - **98% of residents (n=123) were in favor of including PC courses** in the oncology program.
    - **91.3% of residents (n=115) were in favor of having clinical experience in PC during their internship.** The most popular length of internship would be 3 months (53.9%, n=62). 60% of interns (n=69) were in favor of making this internship compulsory in the oncology curriculum.

## CONCLUSIONS

This study highlights the current lack of PC training for oncology residents. However, it also shows that they are keen to change, with 88% of respondents expressing a desire for improvement. As recommended by Hui, the first step should be to introduce more systematic rotation in PC units for oncology residents, and theoretical training as part of their training as oncologists. The results of this study could be used to consider ways of improving the curriculum for oncology residents in France, in order to improve their palliative skills, as part of an overall project to improve early palliative care. It would be interesting to carry out this work in each country, in order to assess the PC training of young oncologists, and then to consider international harmonization of PC training, with the overall aim of improving early and comprehensive care?

## References

1. Kaasa S, Loge JH, Aapro M, Albrecht T, Anderson R, Bruera E, et al. Integration of oncology and palliative care: a Lancet Oncology Commission. Lancet Oncol. 1 nov 2018 ;19(11):e588-653.  
 2. Haun MW, Estel S, Rücker G, Friederich HC, Villalobos M, Thomas M, et al. Early palliative care for adults with advanced cancer. Cochrane Database Syst Rev. 12 2017;6:CD011129  
 3. Jordan RI, Allsop MJ, ElMokhallati Y, Jackson CE, Edwards HL, Chapman EJ, et al. Duration of palliative care before death in international routine practice: a systematic review and meta-analysis. BMC Med. 26 nov 2020;18(1):368.  
 4. Hui D, Bansal S, Strasser F, Morita T, Caraceni A, Davis M, et al. Indicators of integration of oncology and palliative care programs: an international consensus. Ann Oncol. sept 2015;26(9):1953-9