Assessing patient experience through expression of attitudes and emotions during medical encounters

Marie-Eve Lavoie, PhD[1], Claude Richard, PhD, MA[1], Denis Roberge, MPs[2], Marie-Thérèse Lussier, MD, MSc, BSc, FCFP[1,2]

[1]Centre hospitalier de l'Université de Montréal Research Center; [2]Centre intégré de santé et de services sociaux de Laval
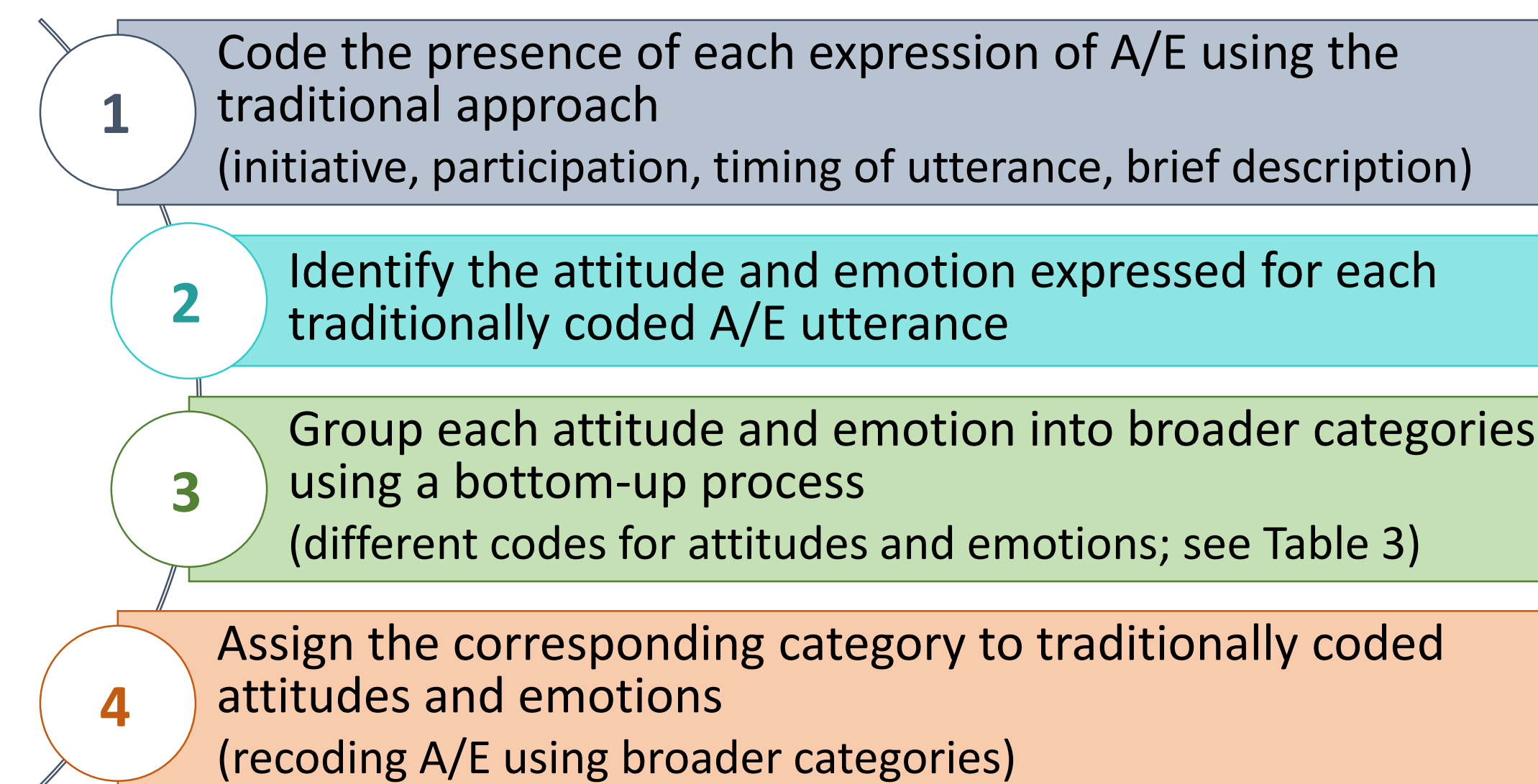
BACKGROUND

- MEDICODE is a validated medical encounter coding system. Content exchanged is described in terms of the occurrence of predefined topics for the discussion of health problems and treatments. For each topic broached, participation is described in terms of initiative, monologue, dyad or dialogue.

- In previous studies using MEDICODE, attitudes or emotions (A/E) as a general category were coded as present/absent. However, this coding limited interpretations of this important component of patient experience in cancer care.

- Recently, the need to study potential associations between expressions of A/E towards cancer and its treatment during consultations and the emotional distress reported by patients after the consultation emerged.

OBJECTIVES

1. To present the adaptations made to MEDICODE to better characterize the A/E expressed by cancer patients.

2. To describe the scope and frequency of A/E expressed.

METHODS

- Traditionally, MEDICODE codes the presence of A/E expressed during consultations (at least one utterance), without distinguishing between attitudes and emotions.

- Adaptations to MEDICODE followed an iterative process using a dataset from prostate cancer patients' radiation oncology consultations*. Based on codes assigned in the traditional manner, the following steps were taken.

1. Code the presence of each expression of A/E using the traditional approach (initiative, participation, timing of utterance, brief description)

2. Identify the attitude and emotion expressed for each traditionally coded A/E utterance

3. Group each attitude and emotion into broader categories using a bottom-up process (different codes for attitudes and emotions; see Table 3)

4. Assign the corresponding category to traditionally coded attitudes and emotions (recoding A/E using broader categories)

- Data analysis:

  - Analysis of consultations audio-recorded using the traditional MEDICODE coding system and the system adapted to better assess the expression of A/E.

  - Frequency of A/E expressed by patients at the initial and end-of-treatment consultations, per study group :
    - A/E combined
    - A/E separately
    - Orientation of A/E separately

  - Ranking of A/E expressed by patients at the initial and end-of-treatment consultations, per study group

* Dataset used: ComCancer study
  - *Sites:* 3 oncology centers in the province of Quebec
  - *Participants:* Patients consulting in radiation oncology for curative treatment of their prostate cancer. Two groups were recruited sequentially, the first received the usual care and the other, the intervention.
  - *Intervention:* Invitation to prepare their consultations with the Let's Discuss Health website (www.discutonssante.ca, in French only) throughout their radiotherapy care trajectory.

TABLE 1. Participants' characteristics, per study group

	Usual care group (n=90)	Intervention group (n=84)
Age, n (%)		
< 70 years old	36 (40.0%)	50 (59.5%)
70+ years old	48 (53.4%)	29 (34.6%)
Undisclosed	6 (6.7%)	5 (6.0%)
Level of education, n (%)		
High school or less	44 (48.9%)	27 (32.1%)
College/CEGEP	12 (13.3%)	18 (21.5%)
University	24 (26.7%)	31 (36.9%)
Undisclosed	10 (11.1%)	8 (9.5%)
Perceived health status, n (%)		
Excellent / very good	50 (59.6%)	44 (55.7%)
Good	27 (32.1%)	26 (32.9%)
Fair/poor	7 (8.4%)	9 (11.4%)
Cancer stage, n (%)		
1 or 2	60 (66.7%)	59 (70.3%)
3 or 4	16 (17.8%)	17 (20.3%)
Unknown	4 (5.0%)	8 (9.5%)

TABLE 2. Consultations' characteristics, per study group

	Initial consultation		End-of-treatment consultation	
	Usual care group	Intervention group	Usual care group	Intervention group
Length of the consultations (min)*	30.3 ± 13.2	35.7 ± 15.4	8.7 ± 4.9	10.1 ± 6.0
Number of consultations, n (%)				
Total	90	84	88	67
With expression of A/E				
Toward cancer	39 (43%)	43 (51%)	54 (61%)	35 (52%)
Toward radiotherapy	25 (28%)	33 (39%)	59 (67%)	45 (67%)
Average number of A/E expressed per consultation, when present*				
Toward cancer	1.6 ± 0.8	1.6 ± 0.7	1.4 ± 0.8	1.5 ± 0.7
Toward radiotherapy	1.5 ± 0.8	1.2 ± 0.8	1.9 ± 0.9	1.4 ± 0.7

* mean ± standard deviation

TABLE 3. Categories of attitudes and emotions included

Attitudes		Emotions	
Positive	Negative	Positive	Negative
"As expected" (+)	"As expected" (-)	Joy	Anger
Interest	Pessimism	Hopefulness	Astonishment
Kindness	Skepticism	Fatalism (+) ("*has to be that way*")	Concern
Motivation	Resistance	Feeling reassured	Discouragement
Optimism			Disorientation
Reassuring			Dissatisfaction
Trust			Fatalism (-)
			Fear
			Sadness

Among consultations with expression of A/E

FIGURE 1. Number of attitudes and emotions expressed by patients toward cancer and radiotherapy, at the initial and end-of-treatment consultations, per study group
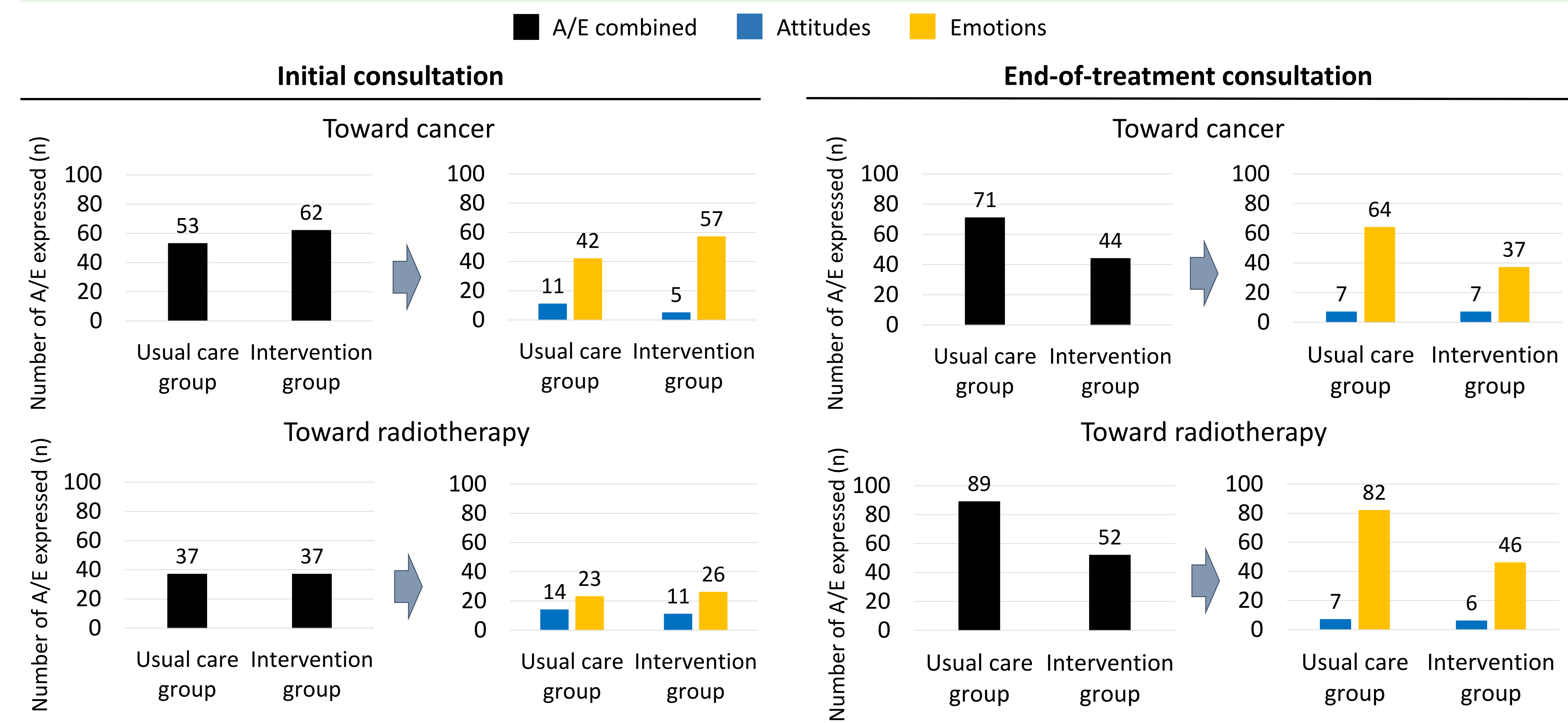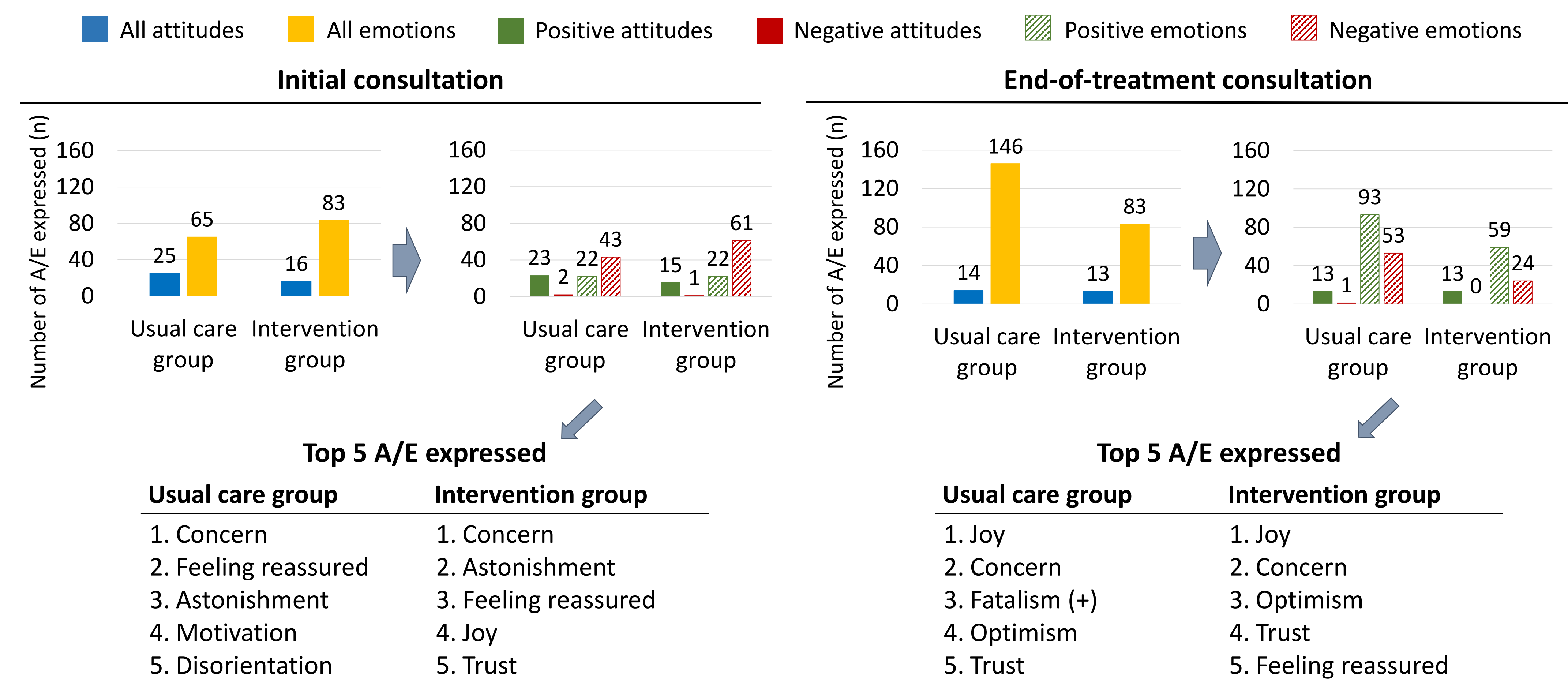
Legend: ■ A/E combined ■ Attitudes ■ Emotions

Initial consultation — Toward cancer: A/E combined Usual care 53, Intervention 62; Attitudes Usual care 11, Intervention 5; Emotions Usual care 42, Intervention 57.

Initial consultation — Toward radiotherapy: A/E combined Usual care 37, Intervention 37; Attitudes Usual care 14, Intervention 11; Emotions Usual care 23, Intervention 26.

End-of-treatment consultation — Toward cancer: A/E combined Usual care 71, Intervention 44; Attitudes Usual care 7, Intervention 7; Emotions Usual care 64, Intervention 37.

End-of-treatment consultation — Toward radiotherapy: A/E combined Usual care 89, Intervention 52; Attitudes Usual care 7, Intervention 6; Emotions Usual care 82, Intervention 46.

FIGURE 2. Number and orientation of attitudes and emotions expressed by patients toward cancer and radiotherapy combined, at the initial and end-of-treatment consultations, per study group

Legend: ■ All attitudes ■ All emotions ■ Positive attitudes ■ Negative attitudes ▨ Positive emotions ▨ Negative emotions

Initial consultation: All attitudes Usual care 25, Intervention 16; All emotions Usual care 65, Intervention 83. Positive attitudes Usual care 23, Intervention 15; Negative attitudes Usual care 2, Intervention 1; Positive emotions Usual care 22, Intervention 22; Negative emotions Usual care 43, Intervention 61.

End-of-treatment consultation: All attitudes Usual care 14, Intervention 13; All emotions Usual care 146, Intervention 83. Positive attitudes Usual care 13, Intervention 13; Negative attitudes Usual care 1, Intervention 0; Positive emotions Usual care 93, Intervention 59; Negative emotions Usual care 53, Intervention 24.

Top 5 A/E expressed (Initial consultation)

Usual care group	Intervention group
1. Concern	1. Concern
2. Feeling reassured	2. Astonishment
3. Astonishment	3. Feeling reassured
4. Motivation	4. Joy
5. Disorientation	5. Trust

Top 5 A/E expressed (End-of-treatment consultation)

Usual care group	Intervention group
1. Joy	1. Joy
2. Concern	2. Concern
3. Fatalism (+)	3. Optimism
4. Optimism	4. Trust
5. Trust	5. Feeling reassured

DISCUSSION

- MEDICODE is a dynamic coding system. Compared to other coding systems of A/E, it allows you to add themes as needed and describe them using the same basic content and interaction dimensions. It provides specific descriptions of A/E expressed during a medical encounter in terms of lexicon and orientation.

- Patient expression of A/E in these radiation oncology consultations occurs in less than two-thirds of consultations, with higher proportions observed at end-of-treatment consultations. The average number of A/E expressed per consultation, when present, ranged from 1.2 to 1.9 A/E, which is quite modest.

- Patients expressed emotions more frequently than attitudes, both towards cancer and radiotherapy. While the patterns are similar for the expression of A/E towards cancer and radiotherapy, the number of instances of A/E expressed differed.

- Negative emotions were expressed more frequently during initial consultations while positive emotions were expressed more frequently during end-of-treatment consultations. This change in the orientation of the emotions expressed may represent the patient's state of mind during these two pivotal consultations in the oncology care trajectory.

CONCLUSIONS

- MEDICODE is a dynamic coding system that now makes it possible to better describe the nature and orientation of A/E expressed during the medical encounters.

- Detailed information about A/E expressed during consultations will contribute to a better appreciation of the psychosocial dimension of the medical encounter.

- A better understanding of the range of A/E expressed could have implications for other measures such as recall of information discussed and level of emotional distress.

ACKNOWLEDGEMENTS