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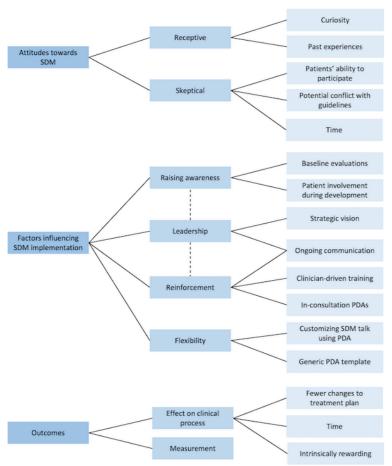


Fig 1. Thematic map of themes and subthemes

### Conclusion

Practicing SDM involves a major shift in mindset for clinicians and our results indicate that it is crucial to design SDM initiatives based on motivational and behavioral mechanisms such as ownership and self-efficacy. A limitation of our study is that we cannot determine the relative importance of the success factors identified. Further research may explore the interplay between these factors and compare paper and digital PDAs to determine which format patients and clinicians find more informative and user-friendly.

# PO-1049 COVID-19 pandemic impact on psychological state and care of cancer patients undergoing radiotherapy

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# Purpose or Objective

Since the outbreak of COVID-19 disease, oncologic patients were identified as subjects at risk of developing serious complications during pandemic. The dangerousness of the disease and the restrictive measures can both be a cause for concern and anxiety among population, and their impact on cancer patients, could be even greater. This study aimed to investigate the psychological state of cancer patients in our Institute.

# Materials and Methods

From April 15<sup>th</sup> 2020 to May 30<sup>th</sup> 2020 all patients attending our Unit were invited to answer a self-administered questionnaire, as promoted by AIOM . Fifty-three anonymous questions were set to evaluate the participants' risk perception of COVID-19 and their psychological status. In addition to demographic characteristics, the questionnaire investigated 5 different domain: provided information about COVID, mood, social relationships, medical history and perceived safety. Descriptive analysis was performed, in collaboration with psycho-oncologist. The patients were also divided in 2 groups, according to phase 1 (50 patients) and phase 2 (50 patients) of the pandemic.

# Results

Demographic characteristics are shown in Table 1. A total of 100 questionnaires were distributed <u>Provided information about COVID</u>: The 42% of patients received satisfactory information about COVID from traditional and social media. In addition, the family doctor (37%) or the radiotherapist (14%) were contacted. <u>Mood</u>: Anxiety and concern were prevalent in the 53% of patients. Sadness, sense of impotence or vulnerability were reported in the 20%. The 26% felt calm or

indifferent. Infection of family members and/or themselves (34%), future economic situation (10%), interruption of oncologic cares (4%) were the main concerns. Anger for political choices was reported in the 8%. Social relationships: A modification in daily life was perceived in the 31%, due to restrictive measures and less familiar contacts. Nevertheless, interpersonal relationships did not modified in the 75% of cases, despite the distance. The 60% was satisfied by quality of life, and the 54% enjoyed daily activity. Medical history: Previous psychological disorders were found in 9 patients. Their impact on risk perception was negligible: 1% contacted the psychologist or needed drugs adjustment to face the crisis, 0% considered suicide. The 3% of patients increased smoke, food and alcohol habits. Perceived safety: The 40% did not postponed visits or exams during this period. The 30% considered the RT Unit a safe place. No significant differences were found between the 2 groups, so all the results were considered together.

Table 1: Patients characteristics (n:100), divided according phase 1 (n:50) and phase 2 (n:50) of COVID-19 epidemic

PATIENTS		PHASE 1	PHASE 2	
N: 100		N:50 (%)	N: 50 (%)	
Age (mean)		62.5	67.2	
Gender	Male	24 (48%)	18 (36%)	
	Female	26 (52%)	32 (64%)	
Civil status	Married/partner	33 (66%)	35 (70%)	
	Single	8 (16%)	12 (24%)	
	Divorced/widowed	9 (18%)	3 (6%)	
Children	Yes	39 (78%)	45 (90%)	
	No	11 (22%)	5 (10%)	
School grade	Primary	13 (26%)	14 (28%)	
	Middle or high	16 (32%)	28 (56%)	
	University	11 (22%)	8 (16%)	
Job status	Employed	14 (28%)	10 (20%)	
	Unemployed	11 (22%)	11 (22%)	
	Retired	25 (50%)	29 (58%)	
Family network	Alone	4 (8%)	5 (10%)	
	Cohabitation family	46 (92%)	45 (90%)	
	First RT visit	3 (6%)	2 (4%)	
Treatment intent	Curative	45 (90%)	46 (92%)	
	Palliative	2 (4%)	2 (4%)	

#### Conclusion

Our analysis showed that, during the COVID-19 epidemic, oncologic patients were worried about the risks of infection, but protective measures by our Institute resulted adequate to limit psychological distress and guarantee a good quality of life. Further actions should be taken to improve sense of security in our Unit.

# PO-1050 Cost-effectiveness analysis of 1.5T MRI-guided radiotherapy: A survey in the MR-Linac Consortium

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# Purpose or Objective

Cost-effectiveness analysis prior to technology implementation is important, but often not performed. The international MR-Linac Consortium works towards evidence-based introduction of the 1.5 Tesla magnetic resonance imaging radiotherapy linear accelerator (MR-Linac). This paper aims to explore the knowledge and opinions about cost-effectiveness studies for implementation of MR-guided radiotherapy (MRgRT).

### Materials and Methods

In an online survey, members of the international MR-Linac Consortium were asked about their knowledge and use of cost-effectiveness analysis of 1.5T MRgRT in their institutions.

### Results

A total of 102 completed survey responses were received from the international MR-Linac Consortium from May to September 2021. Among the respondents, the majority were based in Europe (65%), followed by North America (20%), Asia (11%), Oceana (4%), and Latin America (1%). Of all respondents, 75 (74%) respondents provided MRgRT at their institution, 20 (20%) were in the process of technology installation, 2 (2%) considered technology acquirement and 5 (5%) were unspecified.

The majority of respondents (61%) only understood the purpose cost-effectiveness analysis, 27% had no knowledge about it and 12% indicated to fully understand it. Furthermore, 42% of all respondents indicated that the MR-Linac is being evaluated on cost-effectiveness at their institution, 39% did not know and 19% indicated that such an evaluation was not being performed. Of the 43 respondents evaluating cost-effectiveness, the majority (60%) lacked knowledge of the methodology being applied or used scenario analysis, threshold analysis and/or decision analytical modelling. 54% of all respondents perceived that demonstrating the cost-effectiveness is important for reimbursement, 28% do not know and 18% do not think