



RAB Società Italiana di Radiobiologia

RAO



Comunicazioni orali 7

Establishing a benchmark for Diversity, Equity, Inclusion (DEI) and workforce engagement in radiation oncology in Europe – an ESTRO collaborative project





Radioterapia di precisione per un'oncologia innovativa e sostenibile

DICHIARAZIONE

Relatore: Pierfrancesco Franco

Come da nuova regolamentazione della Commissione Nazionale per la Formazione Continua del Ministero della Salute, è richiesta la trasparenza delle fonti di finanziamento e dei rapporti con soggetti portatori di interessi commerciali in campo sanitario.

- Posizione di dipendente in aziende con interessi commerciali in campo sanitario (NIENTE DA DICHIARARE)
- Consulenza ad aziende con interessi commerciali in campo sanitario (NIENTE DA DICHIARARE)
- Fondi per la ricerca da aziende con interessi commerciali in campo sanitario (NIENTE DA DICHIARARE)
- Partecipazione ad Advisory Board (NIENTE DA DICHIARARE)
- Titolarità di brevetti in compartecipazione ad aziende con interessi commerciali in campo sanitario (NIENTE DA DICHIARARE)
- Partecipazioni azionarie in aziende con interessi commerciali in campo sanitario (NIENTE DA DICHIARARE)
- Altro



Società Italiana di Radiobiologia







Background-1

- ✓ Diversity, Equity and Inclusion (DEI) in the medical workforce may improve patient care and innovation
- Diversity involves being mindful of differences such as age, gender identity, ethnicity, religion, sexual orientation, or disability status
- ✓ Equity means that everyone receives fair treatment and has equal access to opportunities
- ✓ Inclusion of diverse individuals in the workplace is achieved by providing support, access to information, a sense of belonging and job security







Background-2

- ✓ In the United States, if the oncology workforce did not reflect the diversity of the population served, hence **patient outcomes** are generally worse among underrepresented populations
- ✓ A diverse workforce would improve patient care
- Unconscious bias is less present in a diverse workforce, leading to less racial disparities in care
- ✓ **Diversity in academia** leads to higher quality of science and education
- ✓ Innovative research emerges from collaboration between people with different background
- ✓ Diversity in the workforce has been linked to a **better representation** of diverse groups in **clinical trials**





Radioterapia di precisione per un'oncologia innovativa e sostenibile

Material and methods

- ✓ Collaboration between yESTRO and NSC
- ✓ Cross-sectional study
- \checkmark Internal and professional dimensions collected
- DEI and workforce engagement questionnaire by Person et al. rephrased with permission under a licensing agreement with the University of Massachusetts
- This questionnaire is a validated instrument designed for academic medical centres to assess their capacity to promote DEI, resulting in workforce engagement

Meaning for individuals					
Vision/Purpose					
Common Purpose	They experience a connection to the mission and values of the organization				
Access to Opportunity	They can find support for their professional development				
Equitable Reward and Recognition	The organization has equitable compensation practices and non-financial incentives				
Cultural Competence	They believe the institution can make use of its diverse workforce				
Camaraderie					
Trust	They are confident that the practices and procedures of the organization will allow them to bring their best to work.				
Sense of Belonging	They feel connected and accepted in the organization				
Appreciation					
Appreciation of Individual Attributes	They are valued and can navigate the organizational structure				
Respect	They experience a culture of respect				

Gasnier A et al; Radiother Oncol 2022 Person SD et al; Acad Med 2015



Società Italiana di Radiobiologia





Radioterapia di precisione per un'oncologia innovativa e sostenibile

Results-1

Gender identity	Female	54.7%
	Male	44.6%
	Non-binary	0.2%
	Prefer not to answer	0.5%
Civil status	Single/divorced/widowed	24.3%
	Married/in a civil union	69.3%
	Other	5.9%
	Prefer not to answer	0.5%
Age	<30 years old	11.1%
, in the second se	31-40 years old	36.1%
	41-50 years old	25.1%
	51-60 years old	19.8%
	61-70 years old	7.3%
	>70 years old	0.5%
	Prefer not to answer	0.1%
City size	Small – medium town (population \leq 100,000)	15.3%
	Medium city (population between 100,000 and 500,000)	45.7%
	Large (population \geq 500,000)	39.0%
Workplace size	Small (e.g., less than 3 linacs)	21.8%
	Medium (e.g., 3-5 linacs)	43.8%
	Large (e.g., more than 5 linacs)	34.4%
Professional	Clinical	87.7%
setting*	Research	32.0%
	Academic	28.7%
	Other	3.0%
Seniority level	In-training	12.6%
	Staff	29.2%
	Senior staff	29.9%
	Head/group leader	26.5%
	Other	1.8%

168 respondents (21%) felt they belonged to a minority group

- 48 respondents (5.9%) for their race/ethnicity
- 39 (4.8%) for their nationality
- 35 (4.3%) for their age
- 28 (3.4%) for their gender
- 27 (3.3%) for their sexual orientation
- 23 (2.8%) for their religion or belief
- 5 (0.6%) for their disability status
- 1 (0.1%) for their gender identity
- 29 (3.6%) for other reasons
- 51 respondents (6.3%) felt to belong to a minority group for more than one reason



*Respondents could select more than one answer.



Società Italiana di Radiobiologia



Gasnier A et al; Radiother Oncol 2022



Radioterapia di precisione per un'oncologia innovativa e sostenibile

Results-2

Comparison of the scores for professionals belonging to a minority group or not (Wilcoxon signed rank test). Scores for single questions ranged from 1 to 5; if multiple questions referred to the same factor, scores were added (as indicated by the range in the second column).

	Range	Belonging to a minority group		
		No (N = 644)	Yes (N = 168)	P-value
Vision/Purpose	10-50	37.8	35.5	< 0.001
Common Purpose	2-10	8.0	7.6	0.005
Access to Opportunity	2-10	7.7	7.3	0.012
Equitable Reward and Recognition	2-10	7.3	6.8	0.002
Cultural Competence	4-20	14.8	13.7	< 0.001
Camaraderie	6-30	23.6	21.6	< 0.001
Trust	3-15	11.5	10.2	< 0.001
Sense of Belonging	3-15	12.1	11.4	< 0.001
Appreciation	6-30	23.6	21.7	< 0.001
Appreciation of Individual Attributes	3-15	11.6	10.8	< 0.001
Respect	3-15	11.9	11.0	< 0.001
Overall favourable score	0%-100%	70.9%	58.1%	< 0.001
		68	3.3%	

The largest difference between respondents belonging to a minority group or not was observed for the **"trust" factor**. Those belonging to a minority group felt that institutions could make better use of their diverse workforce ("**cultural competence**" factor), and that the culture of civility and positive regard for diverse perspectives could be improved **("respect" factor**)

Gasnier A et al; Radiother Oncol 2022



Società Italiana di Radiobiologia





Radioterapia di precisione per un'oncologia innovativa e sostenibile

Results-3



The lowest overall favourable score was obtained for those who selected "gender" as a minority criterion (47.4%) followed by those who selected "age" (50.9%)

Gasnier A et al; Radiother Oncol 2022







Radioterapia di precisione per un'oncologia innovativa e sostenibile

Conclusion-1

- ✓ These results show that DEI and workforce engagement must be encouraged in Europe
- ✓ Institutions should develop a strong inclusive culture and encourage leaders to foster civility
- ✓ They should set policies to support individuals subject to discrimination and to encourage diversity best practices, for example by organizing unconscious bias workshops for leaders
- ✓ Hiring practices should be transparent, for example by setting criteria to standardize applicants' evaluations and mitigate bias during the hiring process



Società Italiana di Radiobiologia





Radioterapia di precisione per un'oncologia innovativa e sostenibile

Conclusion-2

We believe that DEI should be promoted and workforce engagement increased: it would help improve the quality of both treatments and research in radiation oncology by better representing and addressing the diversity among patients, helping to move towards personalized care, by encouraging heterogeneous perspectives to guide innovation, and by improving the well-being of professionals



Società Italiana di Radiobiologia





Radioterapia di precisione per un'oncologia innovativa e sostenibile

Further research

Qualitative research

Semi-structured interviews



BOLOGNA, 25-27 NOVEMBRE PALAZZO DEI CONGRESSI

Abravan A et al; under review



Società Italiana di Radiobiologia





Radioterapia di precisione per un'oncologia innovativa e sostenibile



Thanks for your attention

Pierfrancesco Franco MD, PhD, MPH candidate

Dipartimento di Medicina Traslazionale, Università del Piemonte Orientale, Novara

Dipartimento di Radioterapia Oncologica, AOU 'Maggiore della Carità', Novara

E-mail: pierfrancesco.franco@uniupo.it



@Pier_Franco_MD

On behalf of yESTRO and ESTRO NSC



Società Italiana di Radiobiologia

