Professional Burnout in European Young Oncologists:

A European Survey conducted by the ESMO Young Oncologists Committee

Dr Susana Banerjee MBBS MA MRCP PhD
Member of the ESMO Young Oncologists Committee
Consultant Medical Oncologist, Royal Marsden, London, UK

Co-authors

Young Oncologists Committee (YOC) members

R Califano, J Corral, E de Azambuja*, L De Mattos-Arruda, V Guarneri,
M Hutka*, K Jordan*, E Martinelli, G Mountzios, M Öztürk, M Petrova,

S Postel-Vinay, M Preusser, C Qvortrup, M Strijbos, N Volkov, D Olmos*

No Conflicts of Interest

* Previous YOC members

ESMO

Background - 'Medical Burnout'- the problem

- Oncology is a rewarding profession but caring for patients with cancer can also be demanding and stressful

Potential Factors
Constantly facing patient life/death decisions, delivering bad news
Supervising toxic therapies
Limited ability to prolong life substantially for many patients
Keeping up at the forefront of rapid scientific and treatment advances
Increased workload, administrative requirement, medicolegal issues, reduced resources

Potential Consequences	
Negatively impact quality of care	Substance abuse
Increase medical errors	Depression
Leave profession/early retirement	Suicide

Shanafelt and Dyrbye JCO 2012[1]

Background - 'Medical Burnout'

- A syndrome characterised by:

  loss of enthusiasm for work (emotional exhaustion)

  feelings of cynicism (depersonalisation)

  loss of perspective that work is meaningful (personal accomplishment)

- Pub Med search; >700 doctors; >170 in oncologists; >50 oncology nurses (including JCO, Lancet Oncology, EJC)

- US survey oncologists- 45% burnout rate[2]; 35% leave current position[3]; 27% reduce clinical work hours[3]

- Implications for the future of oncology profession and patient care

Shanafelt et al JCO 2014[2], Shanafelt et al JCO 2014[3]

Aim

To investigate the burnout prevalence, work and lifestyle factors amongst European oncologists ≤40 (YOs)

Methods

- Online survey available on ESMO website January 2013- 2014

    Targeted promotion to European YOs via YO Corner on esmo.org, YO E-news, via national YO group representatives and YOC members to use national network of YOs

- Validated Maslach Burnout Inventory (MBI)

- Additional questions exploring work/ lifestyle factors

- Parametric test (i.e. Chi-square test, U-mann whitney or Kruskal-wallis test)- were used to find associations of variables with burnout. A predictive model of burnout was derived using a Logistic Regression multivariate model which initially included all significant variables in the univariate analyses

ESMO

Maslach Burnout Inventory (MBI)

MBI is the most widely used tool to measure burnout

22 Questions:

Emotional exhaustion ≥27 high

- measures feelings of being emotionally overextended and exhausted by one's work

Depersonalisation ≥10 high

- measures an unfeeling and impersonal response toward recipients of one's service, care treatment, or instruction

Personal accomplishment <33 low

- measures feelings of competence and successful achievement in one's work

high scores on the depersonalisation and/or emotional exhaustion=burnout
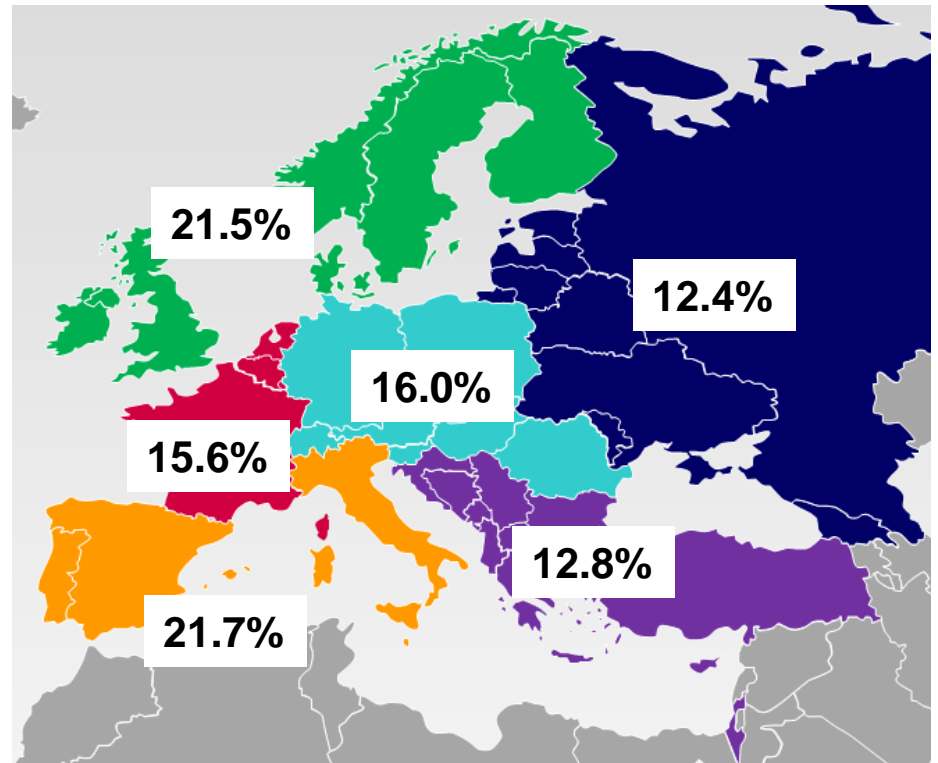
Results

- Demographics of participants

- Burnout rates

- Associated factors and burnout prediction
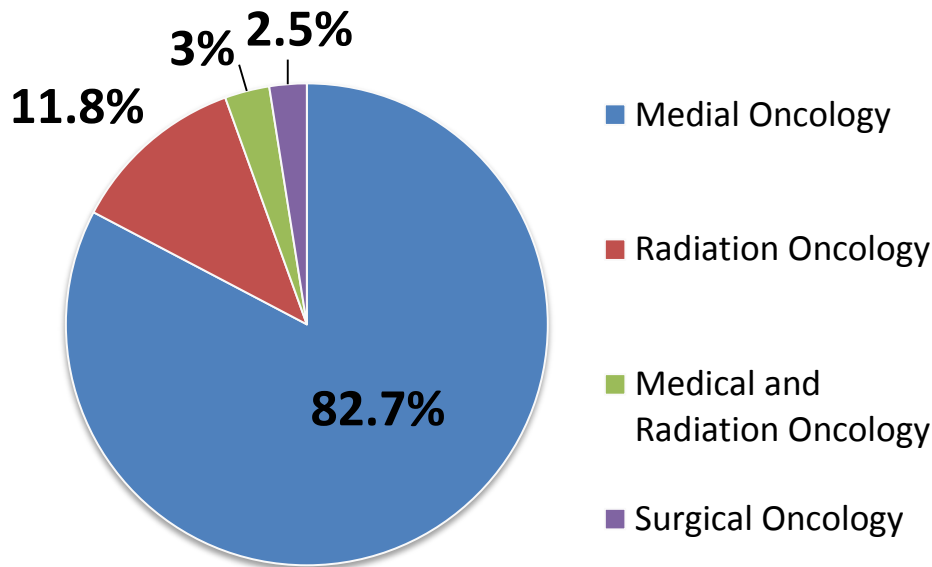
Demographics of YO participants (1)

Regions

737 surveys in total across 40 European countries
595 (81%) were YOs

- **Southwestern Europe**   **21.7%**
- **Northern E. & British Isles**   **21.5%**
- **Central Europe**   **16.0%**
- **Western Europe**   **15.6%**
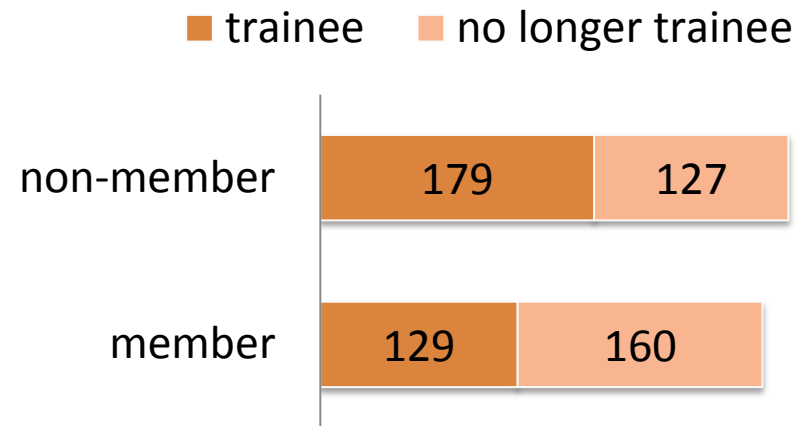- **Southeastern Europe**   **12.8%**
- **Eastern Europe**   **12.4%**
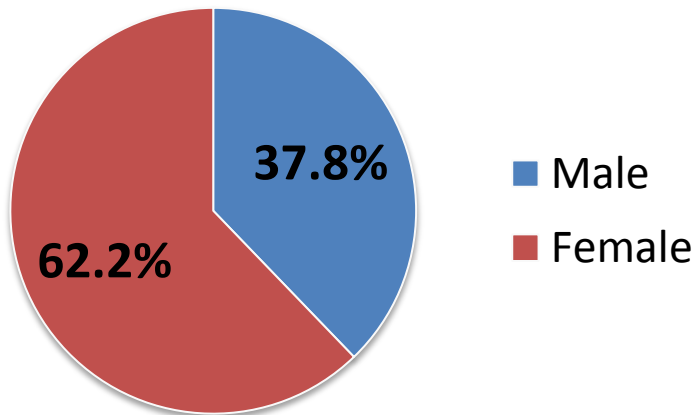
Demographics of YO participants (2)

Specialty

3% 2.5% 11.8% 82.7%

- Medial Oncology
- Radiation Oncology
- Medical and Radiation Oncology
- Surgical Oncology

ESMO members and trainees

- trainee
- no longer trainee

	trainee	no longer trainee
non-member	179	127
member	129	160

289/595 (49%) ESMO members
308/595 (52%) trainees

Demographics of YO participants (3)

Gender

- Male 37.8%
- Female 62.2%

Hospital type / clinical setting

- cancer centre 31.3%
- university hospital 49.7%
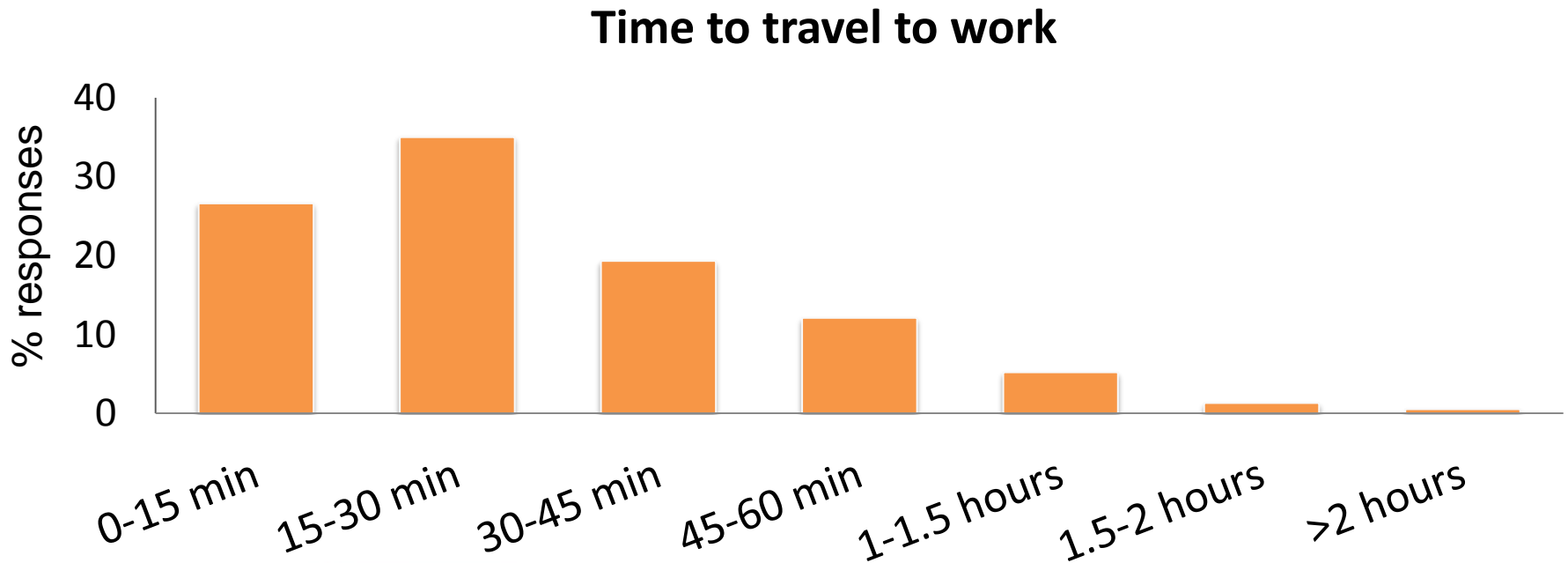- general hospital 15.5%
- private hospital/clinic 3.5%
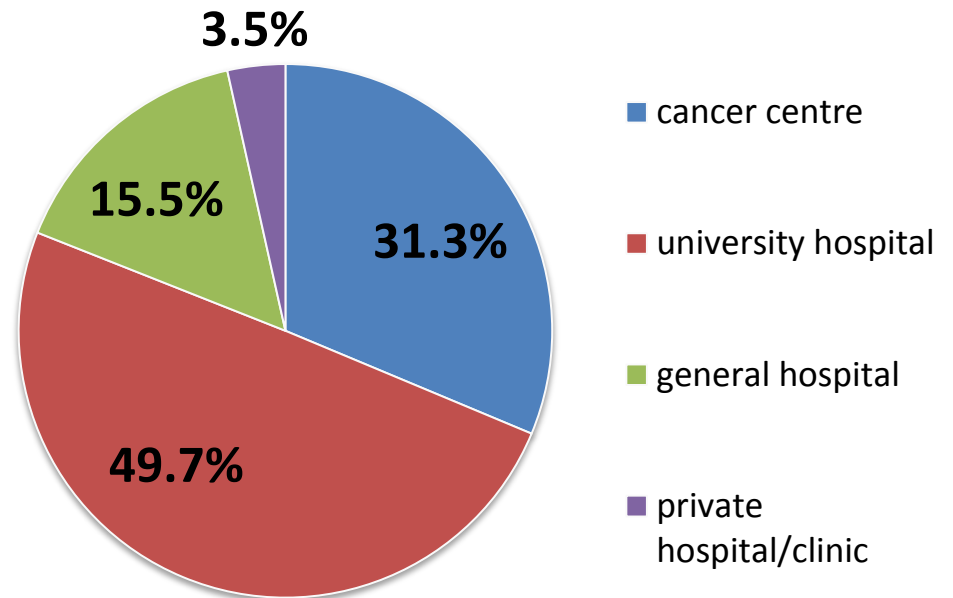
Demographics of YO participants (4)

Practice

Median number of oncologists in hospital: 20

Median number of patients/week: 50

Time to travel to work

Demographics of YO participants (5)

Lifestyle factors

81% in a relationship

43% have children

23% live alone

40% felt had adequate vacation time

63% did not have a good work-life balance

Burnout support

How many times have you asked for support for distress or burnout?

Trainee:

Times	N	%
Never	226	73.4
Once	43	14.0
Twice	16	5.2
3 times	8	2.6
4 times	5	1.6
≥5 times	10	3.1

Post-trainee:

| Times	N	%
Never	237	82.6
Once	24	8.4
Twice	12	4.2
3 times	1	0.3
4 times	1	0.3
≥5 times	10	3.1

74% reported no access to support services for doctors

ESMO

Burnout Rates across Europe

Overall Burnout rate 71.4%

Burnout rates were significantly different across Europe (p<0.0001)

Central Europe   **84.2%**
Southeastern Europe 82.9%
Southwestern Europe 79.1%
Eastern Europe   **73.0%**
Western Europe 63.4%
Northern E. & British Isles 52.3%

52.3%
73.0%
84.2%
63.4%
82.9%
79.1%

ESMO
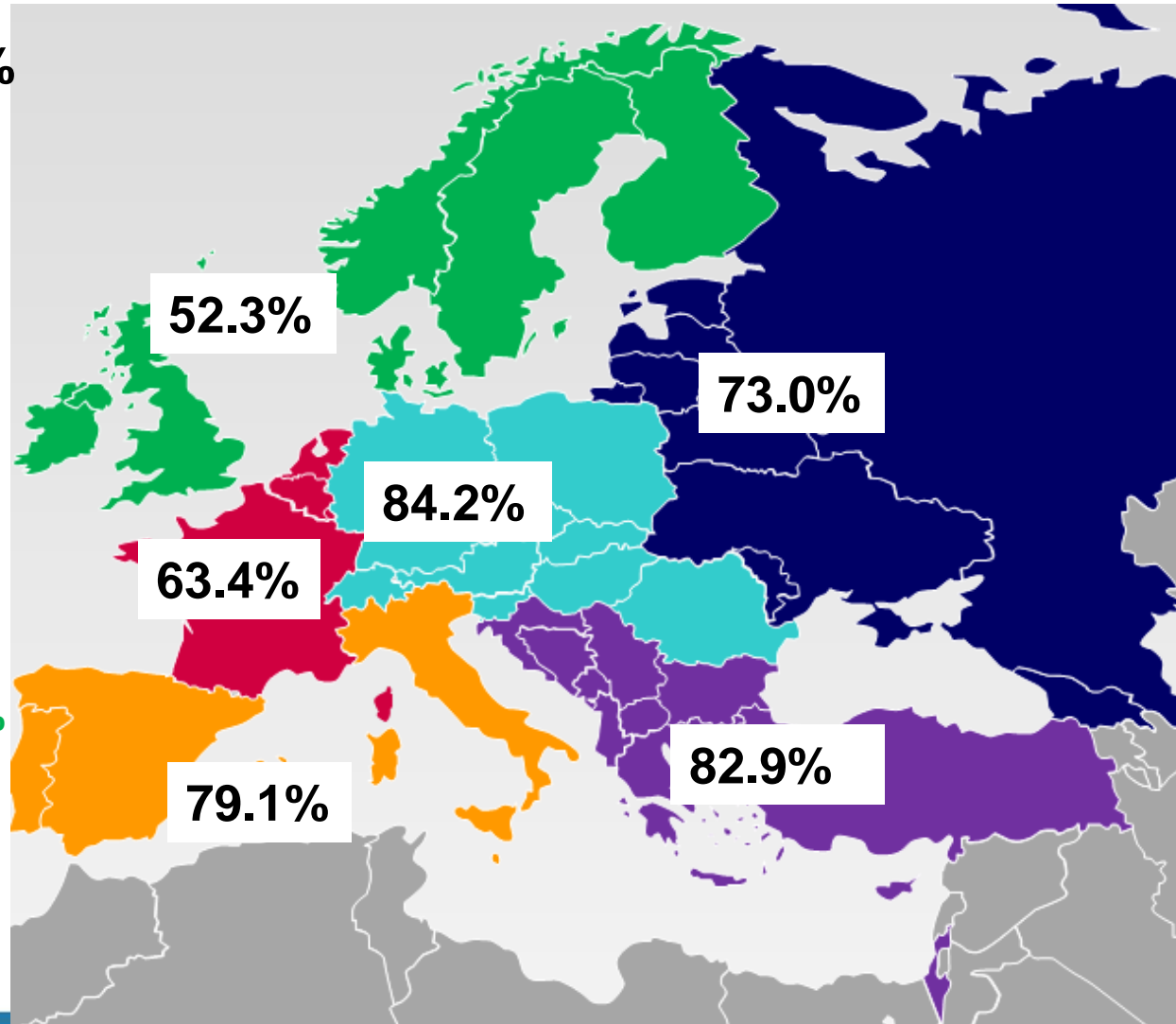
Factors associated with Burnout

Men vs Women

- No significant difference in burnout rates: 75% vs 69% p=0.120
- Men had significantly higher depersonalisation scores 60% vs 45% p=0<0.001)

Age

- No significant difference in burnout rate
- Low Accomplishment highest in 26-30yrs p=0.008

  (45% 26-30 vs 27% in 36-40)

ESMO

Factors associated with Burnout

Higher burnout in:

- hospitals with less oncologists p=0.004

- higher number of patients/week p=0.007

- no access to support services p=0.001

- poor work-life balance (83% vs 52%, p<0.001)

- not in a relationship (81% vs 69% p<0.001)

- living alone (80% vs 69% p=0.006)

- no children (75% vs 67% p=0.030)

- not enough vacation time (82% vs 56% p<0.001)

ESMO

Significant Factors associated with Burnout

Univariate analyses (p<0.05)

- European region
- Number of Oncologist in centre
- Patients seen per week
- Travel time to work
- Access to support services
- Recreation hours per week
- Work/life balance
- Live alone
- Current Relationship
- Children
- Vacation time

Significant Factors associated with Burnout

Multivariate analyses

| Independent Factors	OR	P-value
European region * Southeastern Europe vs Eastern Europe * Central Europe vs Eastern Europe * Western Europe vs Eastern Europe * North Europe & Bristish Isles vs Eastern Europe * Southwestern Europe vs Eastern Europe	1.7 2.9 1.0 0.8 2.0	0.014
Good work/life balance * No vs Yes	3.6	<0.001
Enough vacation time? * No vs Yes	1.8	0.008

ESMO

Best Predictive Burnout Model

The best predictive model for burn-out in our series according to AUC included: All the significant independent variables from multivariate analyses:

European region; good work/life balance; vacation time

And travel time

- AUC 0.774 (CI-95% 0.733-0.815), p<0.001

- Overall correct classification rate 75.4%

ROC curve
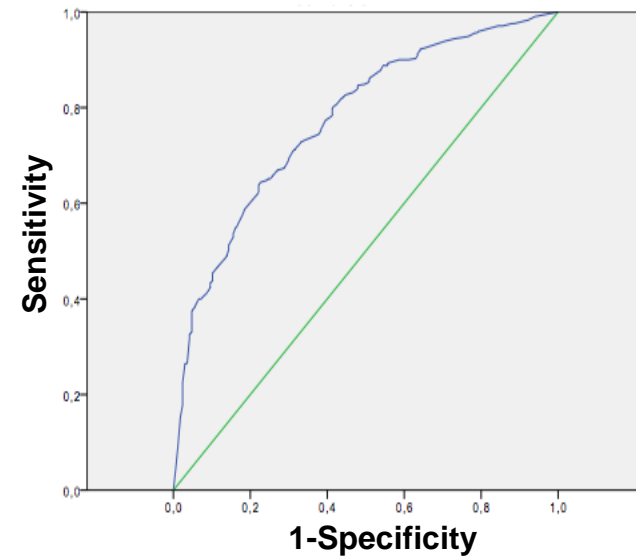
Conclusions

- This is the largest burnout survey of European YOs

- Burnout is common amongst YOs and rates vary across Europe

- Achieving a good work/life balance and adequate vacation time may reduce burnout levels

- Raising burnout awareness, support for oncologists and interventional research are needed

ESMO

Acknowledgements

All survey participants, ESMO Young Oncologists Committee, national YO representatives and ESMO administrative staff