

EONS Cancer Nursing Index 2020©

National profile: North Macedonia

Introduction

In the [RECaN project](#) EONS highlighted important differences in cancer nursing across Europe. The EONS Cancer Nursing Index 2020 (ECNI) was developed by the [EONS Advocacy Working Group](#) to illustrate the development and status of this profession in Europe. The index (with scores from 0-100) includes 22 items covering the following dimensions: Education and Career Development, Patient and Occupational Safety, Recognition, Working Conditions and Impact and Workforce statistics.

The Index is based on data from the following sources:

1. EONS Survey on Patient and Occupational Safety (anonymous survey, available in 9 languages, which at time for this analysis had over 650 responses from cancer nurses in 38 countries)
2. Interviews with leading cancer nursing experts. Nurses from 38 of 42 invited countries participated
3. Work force statistics (from ec.europe.eu/Eurostat and OECD)

A scoring system was developed by EONS Advocacy Working Group to reflect the level of development for the different Index dimensions/items. For items with a variety of responses from the same country, the most frequently reported response was used. The purpose of the Index is primarily not to rank some countries as better than others but to illustrate cancer nursing profiles, differences and areas in need of development. The Index could be used in the development of cancer nursing in each country but also for general European progress.

Dimension/item	Maximum score	Mean score (min-max)	North Macedonia	Comment
Overall score	100	48 (16 -78)	41	
Education and career development (5 items presented below)	23	9 (0-18)	1	
Specialist education on university level	5		0	
EONS Framework recognized/supported by Ministry of Education	5		0	
Master programs in cancer nursing	4		0	
Advanced cancer nursing roles established	4		1	'Planned' To obtain the highest score for this item, advanced cancer nursing roles should be fully implemented and recognized on a national level.
Professors in cancer nursing	4		0	
Patient and occupational safety (8 items presented below)	36	18 (3-36)	14	
Safety guidelines (cytotoxic drugs) available	5		5	
Guidelines during pregnancy (cytotoxic drugs)	5		0	
Pregnant and /or breastfeeding women assigned other tasks that don't involve direct contact with cytotoxic/radioactive drugs	5		2	'Sometimes' To obtain the highest scores (5) for this item pregnant/breast feeding women should be forbidden to perform task with risks for exposure to cytotoxic/radioactive drugs at all workplaces.
Systematic testing for occupational exposure (surface swipes)	3		0	Surface swipes were not reported by the North Macedonian nurses. To receive highest possible scores (3) for this item, testing should be systematically implemented at all workplaces.

Speak-up or whistle blower policy implemented for all members of staff	3		0	
Access to cytotoxic spillage kit and PPE	5		1	'Sometimes' To obtain the highest score (5) for this item, the nurses should have reported that they always have access to PPE.
Formal training before administering cytotoxic drugs	5		0	To obtain the highest score (5) for this item, formal education should be obligatory before managing cytotoxic drugs at all workplaces.
Nurses not preparing cytotoxic drugs	5		1	'It happens every month' To obtain the highest score (5) for this item, the responding nurses should have reported that it never happens.
Working conditions and the Impact on cancer care (4 items presented below)	20	15 (3-19)	17	
Level of adherence to European Working Time Directive (EWTD)	5		5	
Risk of negative consequences if asking for alternative duties pregnancy/breast feeding	5		2	'Sometimes' To obtain the highest score (5) for this item all responding nurses should have reported that there is no risk for negative consequences.
To what extent hospital beds are closed due to cancer nursing shortages	5		5	
To what extent cancer treatment delayed due to cancer nursing	5		5	
Recognition (4 items presented below)	18	8 (0-15)	8	
Does the country have a cancer nursing society?	5		0	
Does the country have a national cancer plan that includes nursing care?	3		3	
Does cancer centers in the country have Board positions dedicated for cancer nursing?	5		5	
To what extent is nurse-led cancer care implemented in the country?	5		0	To obtain the highest score (5) for this item, nurse-led care should be fully implemented and recognized on a national level
Work force statistics (1 item)	3	1 (0-3)	1	
Number of practicing nurses/1000 citizens (www.europe.eu/Eurostat and OECD)	3		1	To obtain the highest score (3) North Macedonia should have >8 practicing nurses/1000 habitants.

Strengths and recommendations for improvements

The total score for North Macedonia (score 41) were slightly lower than the total mean score (score 48) in the ECNI. Other countries with similar total score were Albania and Hungary (both with a total score of 35), Bosnia (total score 36) and Italy (total score 42).

North Macedonia could improve their scores in all five dimensions of the Index. Patient and Occupational safety are major concerns as most of the items in this dimension received low scores. Most of the factors known to improve safety, such as education, guidelines for pregnant nurses and reporting policies, were not confirmed by the nurses in North Macedonia. Cancer nurses in North Macedonia also report that they prepare cytotoxic drugs every month, in contrast to most other countries (where pharmacists always perform these tasks). They run the risk of negative consequences if they ask for different duties during pregnancy and breast-feeding. This, in combination with inadequate supply of PPE, causes concern and, jeopardizes both patient and occupational safety.

With regards to Education and Career Development, the results indicate that major efforts are needed to improve access to education at all levels. As a consequence, advanced level nursing roles and nurse-led care are not implemented.

North Macedonia also has lower number of practicing nurses compared with most countries in the Index. Despite this, cancer nurses in North Macedonia report that hospital beds never close or that cancer treatments never are delayed due to nursing shortage.

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