DOCTORS' AND OLDER PATIENTS' HEALTH LITERACY OF FUNCTIONAL DECLINE AND FRAILTY

Results from Latvia and Romania

- EU Policy Recommendations
- Executive summary

The Standing Committee of European Doctors

The Romanian College of Physicians

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The Latvian Medical Association

Maastricht University Leading in Learning!

The European Medical Students' Association

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EU Policy Recommendations

Introduction

The present study generated data for the first time on the levels of health literacy of functional decline and frailty for doctors and older patients (60+ years old) in Latvia and Romania. Furthermore, the study tackles not only the lack of data on the topic but it provides insight from two EU member states, a Central-Eastern and a Baltic member state, that (also) struggle with the fall in fertility[1] coupled with high percentage of outward migration predominantly within the early working age population. Projections on the aging of the population in Latvia and Romania are particularly worrying as the fall in fertility, migration and life expectancy that is below that of the EU-15 member states accelerate the impact of the projected demographic challenges at an unprecedented rate.

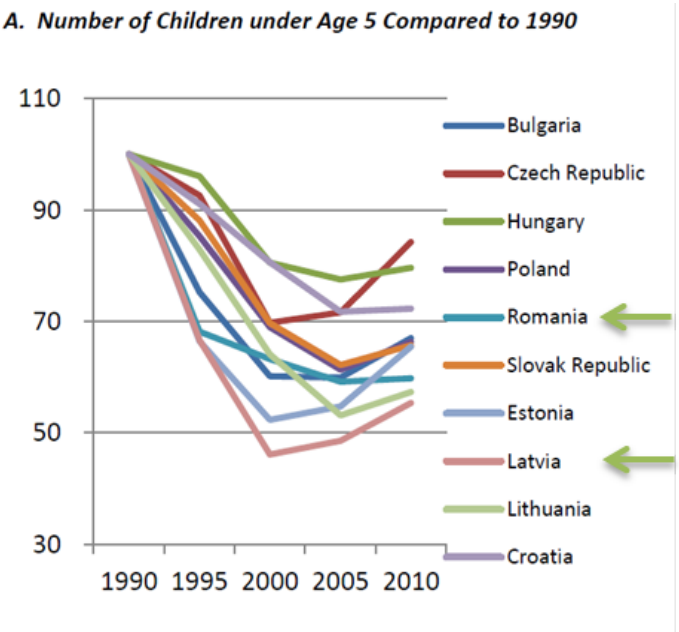

Figure 1: Source – What's Next in Aging Europe: Aging with Growth in Central Europe and the Baltics, p. 38, Based on United Nations Population Division (2013)

The framework of the present study is the European Innovation Partnership on Active and Healthy Ageing (EIPAHA) at EU level. The study is part of a commitment of the Standing Committee of European Doctors (CPME) and the partners in the present study to understand the health literacy of functional decline and frailty and raise awareness on prevention of frailty and functional decline.

CPME was actively contributing to the Strategic Implementation Plan of the EIPAHA[2], identifying the need for action on **Prevention of Frailty and Functional Decline as a European public health priority with significant scope for innovation and positive contribution to demographic challenges[3].**

[1] A World Bank report from March 2015 situate the fertility levels to be lower than those in the EU-15. Please see page 38 for further information.

[2] CPME Press release, 7 November 2011: The Strategic Implementation Plan for Active and Healthy Ageing: CPME Welcomes Adoption and Urges to Immediate Action.

RECCOMENDATION 1:

The novel data from Latvia and Romania contributes to the general health data in the two countries providing new insights to health literacy on functional decline and frailty. *This study is further supported by the World Bank recommendation of March 2015 "What's Next in Aging Europe: Aging with Growth in Central Europe and the Baltics" insofar as it meets the call concerning the need for further action in countries such as Latvia and Romania.*

*Chapter VI, pt. 26 of the Council of Europe Recommendation (CM/Rec(2014)2) on the promotion of human rights of older persons of 19 February 2014 encourages "*appropriate measures at national level, including preventive measures, to promote, maintain and improve the health and well-being of older persons as well as health care and long-term quality care that is available and accessible"; *pt. 34 also states "Care givers should receive sufficient training and support to adequately ensure the quality of the services provided. Where older persons are being cared for at home by informal carers, the latter should likewise receive sufficient training and support to ensure that they are able to deliver the care needed".*

With many international initiatives around the topic and efforts to improve health literacy, ***the present study should be expanded to understand the precise level of health literacy for frailty and functional decline at a European scale. Furthermore, such a wider scale study would also provide a better understanding behind mechanisms to promote patient empowerment and support self-care.***

RECCOMENDATION 2:

Preliminary results from Latvia and Romania show data that complements the results from the European Citizens' Digital Health Literacy Eurobarometer Study as well as the HLS-EU survey findings. The European Citizens' Digital Health Literacy Eurobarometer report aims to assess the extent and use of the internet to manage health. It also tries to identify and understand which are the sources of health information citizens prefer other than the internet. The study finds that 79% of respondents ask their doctor when searching for information elsewhere than the internet (European Citizens' Digital Health Literacy Eurobarometer Study, p. 64*). In Romania the percentage is 77% and in Latvia 84%.*

In the present study that looks at the age group of 60+ year old persons from Latvia and Romania, the results are similar and doctors are the main source of information with regard to both functional decline (54.8%) and frailty (50.8%). However, when comparing the results from the Eurobarometer study with the present study for a similar age group (the older population), 26% above 55 years old indicate to have never used the internet and 20% state not to have access to the internet. Furthermore, patients in Latvia and Romania indicated to prefer TV and radio broadcasts as a means to improve awareness of functional decline and frailty. This correlates to the decreased digital access and preferences of the older population. Of the older age group using the internet for health information and who indicated that were not satisfied with the health information found, they did so primarily because they felt the information was commercially oriented (47%).

Another interesting finding of the Eurobarometer study that underlines the need to improve health literacy refers to the immediate actions older people took after searching the internet for health information: 1 spoke to friends or relatives (43%); 2.made a doctor's appointment (37%) and 3. took the necessary measures to treat oneself (self-medication) or change lifestyle (30%).

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[3] CPME Press release, 6 November 2012: CPME Supports and Contributes to the Action Plan on Prevention of Frailty and Functional Decline. For the composition of the Steering Group of the EIPAHA members, please see the Strategic Implementation Plan – page 42, Annex I.

With regard to the HLS-EU study, results of the levels of general health literacy in Bulgaria and Greece decrease with the age group (Comparative report on Health Literacy on Eight EU Member States, page 47). The present study shows similar results for this age group.

- **RECCOMENDATION 3:**

  While the health literacy levels are higher in Latvia and Romania than shown in the HLS-EU study of 8 EU member states, patients have most difficulty understanding the concepts of functional decline and frailty when considering the competences to find, understand, access and apply information related to functional decline and frailty.[4]. Furthermore a high percentage of patients considered necessary actions on prevention of functional decline and frailty. It is recommended to replicate this research in other EU member states as increased knowledge concerning functional decline and frailty will have added value at EU level in support of healthy ageing.

- **RECCOMENDATION 4:**

  While some of the doctors responding to the questionnaire were well aware, understood and applied concepts on functional decline and frailty, when questioned about specific scales of measurement or in-depth information about functional decline and frailty, generally other doctors could not point towards specific scales (reference questions) or how much doctors focus on these areas in daily practice. Hence it is recommended that the health literacy concerning functional decline and frailty among doctors should be part of curricula for general practitioners and other medical specialties working with older patients.

- **RECCOMENDATION 5:**

  While this survey faces limitations in terms of sample size and geographical representativeness, a wider population that includes, for the doctors, more specialties could potentially offer more in-depth insights and more precise indications on the levels of health literacy related to functional decline and frailty.

The surveys on functional decline and frailty, which included separate questionnaires to patients as well as health professionals were carried out between April and October 2014. The responses were collected, analyzed and joined together with the present recommendations and respective summary between October and April 2015.

Valuable feedback was also received from:

- Michelle Glekin, Israeli Medical Association,
- Prof Dr Tomasz Kostka, Medical University Lodz,
- Dr Konstanty Radziwiłł, CPME Immediate Past President,
- Dr Itzhak Siev-Ner, Israeli Medical Association,
- Dr Anthony Woolf, the Bone and Joint Decade Association.

[4] Pelikan, J, Rothlin, F, Ganahl, K., *Comparative report on Health Literacy on Eight EU Member States, 2012. HLS-EU Consortium main partners:Prof Kristine Sorensen, Helmut Brand, Maastricht University, the Netherlands.*

Summary of results:
Analysis of patient responses concerning functional decline and frailty

The study analysed 301 responses from 60+ older patients living in Latvia and Romania.

Most respondents were aged between 65 and 74 years (38.2%), 65% live with their family, 73.4% were fully retired whereas only 8.3% were not retired. 12.6% declared that family and home were their work. A very high number of patients declared to be aware of age-related functional decline, 76.4%. The main source of information on functional decline is represented by doctors (54.8%), health broadcasts (22.9%), relatives, friends (20.3%) and journals (19.9%). Concerning frailty the responses were similar, 50.8% saw doctors as a main source of information and instead of journals, magazines were 4th in terms of source of information (20.3% of respondents indicated magazines).

A rather significant percentage of patients found it difficult to access information on functional decline (18.6%). Most respondents however found it easy to access information (46.18%). Concerning frailty the responses were similar ranging from easy (46.51%) to very easy (10.96%) and 18.27%, again, a rather significant percentage that indicated it is difficult to access information.

The most trusted sources of information were: doctors, health broadcasts, nurses, pharmacists and magazines. 44.2% of respondents indicated that TV and radio programs, a hotline where the public can call, an increase in physicians awareness and an increase in the awareness of the young generation, are measures that should be implemented to prevent functional decline and frailty.

The levels of health literacy both on functional decline and frailty are high in both countries. The questionnaires included in the study adapted the conceptual HLS-EU model linking health literacy to include the competencies to access, understand, appraise and apply information on functional decline and frailty. Table 1 below summarizes the main results.

TABLE 1. Summary of responses

Health literacy			Functional decline	Frailty
Awareness			76.4% of respondents are aware of functional decline	75.75% (aware of frailty)
Access	Source		10.3% do not know or access information on functional decline	10.6% do not know or access information on frailty
	Type		18.6% difficult access and 14.62% did not know or cared	18.2% difficult access and 10.3% did not know or cared
Understand			21.93% found it difficult to understand the concept	19.93% found it difficult to understand the concept
Appraise	Look for information		44.85% of respondents seek information frequently but also a significant percentage never seeks information (11.63%) or rarely seek information (37.54%).	
	Trusted sources		A very high percentage indicate the doctor as the most trusted source of health information (79.4%), followed by health broadcasts, a more traditional source of digital information (31.2%), nurses (21.9%), pharmacists (20.6%) and magazines (18.6%).	
	Judge relevance		41.6% indicated functional decline is very relevant for their health condition and 35.55% judged it as important. This is a very high importance attached to the condition.	81.73%, a slightly higher percentage of respondents, of respondents gave judged frailty important and very important to their health condition.
	Gain knowledge		69.76% respondents gave high and very high priority to gain knowledge on functional decline.	66.77% respondents gave high and very high priority to gain knowledge on frailty
	Reversibility			37.54% considered pre-frailty reversible, in line with the preferences to seek information on the condition. 35.55% did not consider frailty reversible.
Apply	General knowledge		Patients most often communicated about functional decline and frailty with family (59.5% - 179 respondents), then with doctors (50.2% - 151), and then with relatives/friends/neighbours (34.9% - 105).	
	Healthcare	Regular physical activity or exercise	Most respondents stated they did walk for 30 minutes more than three times a week (28.6% - 86 respondents).Yet an alarming percentage (15% - 45 respondents) answered “no” to this question. It should be noted that 40.2% of the interviewed respondents failed to answer this question. Most respondents did not walk 60 minutes at all (24.6% - 74 respondents). 23.9% (72) stated they did walk 60 minutes at least three times a week. It should be noted that 23.9% of the respondents did not answer this question. 32.9% (190) of the respondents stated their daily routine included some form of physical exercise more than three times a week. It should be noted that 36.9% (111) respondents did not check this answer.	
		Increased weakness	Most respondents responded they did feel weaker (23.59% - 71 respondents) or they thought they might have become more weak (29.57% - 89). Only 59 (19.6%) responded “no” and other 18 (6%) failed to give an answer.	
		Consult doctor	Most respondents had consulted a doctor regarding their weakness (81.4% - 149 respondents). 4.4% (8	

			respondents) did not respond to this question.
		Recurring tiredness	Most respondents declared they felt more tired in general (31.56% - 95 respondents) or they thought they felt more fatigue (30.56% - 92 respondents).
		Physical pattern changes	Most respondents (33.6% - 101) did not feel a change in their balance. The percentage of respondents feeling a negative change in their mobility was slightly higher (25.2% - 76) than that of respondents who felt that nothing had changed in their mobility (23.9% - 72) or were unsure (23.3% - 70). Most respondents stated they felt stiffness, especially in the morning (34.9 % - 105 respondents). Most respondents declared they did not drop objects (40.9% - 123). Most respondents declared the time they needed for their daily activities was not prolonged (26.9% - 81 respondents). Most respondents stated they did not need a prolonged time to cross the street (34.2%).
		Psycho-cognitive intellectual patterns	Most respondents stated it was more difficult for them to recall certain information (34.9%). Most respondents declared they did not find it difficult to find their way to a destination (58.8%). Most respondents felt there was nothing changed in their laughing or smiling pattern (52.8% - 159). Most respondents stated they were not crying more easily (44.9% - 135). Most respondents felt that nothing had changed in their performance of regular intellectual tasks (46.2% - 139). Most respondents felt that nothing had changed in their understanding of instructions/ directions (46.8% - 141). Most respondents felt that nothing had changed in their performance of mathematical tasks (40.5% - 122).
		Weight loss that patient cannot explain	Most respondents did not notice any weight loss (69.77% - 210 respondents).
	Disease prevention and health promotion	Measures to prevent functional decline related to ageing	Most respondents considered that all the listed measures should be taken to prevent age-related functional decline and frailty (44.2% - 133). Of course, TV and radio programs are preferred. The listed measures in the options for response were: a)TV and radio programs on the issue to increase awareness on the subject matter and education for healthy lifestyle b) Hotline where the public can call to ask questions about different resources available (e.g. where to get transportation to different services, access to buildings, what health and social services are available for the elderly, etc.) c) Increase physicians' awareness and knowledge with regards to available screening and treatment approaches d) Increase awareness of the younger generation to help them recognise, be sensitive

Based on the conceptual model of health literacy and the results summarized in Table 1, patients are perceived to have a low level of health literacy. While the levels of access may be improved, the understanding of functional decline and frailty is even a bigger problem with around 20% of the respondents having difficulty understanding and only around 10% having difficulty accessing information.

*NB: Within the answers to the questionnaire for 60+older patients, there were free answers to questions which, unfortunately have not been translated from Latvian into English. Therefore, a list of frequent answers could not be compiled.

Analysis of doctor responses concerning functional decline and frailty

300 doctors responded to the questionnaire: 148 doctors practicing in Romania and 150 in Latvia. 1 doctor indicated Andorra was his main place of practice and another Romanian doctor indicated Nigeria as his main country of practice. All Latvian respondents were over 44 years old. The Romanian sample is clearly skewed in favour of "young" ages. This reflects the increasing number of physicians in the new generations. Concerning the doctors' specialties we registered a disproportionate number of psychiatrists in the Latvian sample, and of neurosurgeons in the Romanian sample. While 88.5% of Romanian doctors declared a single specialty, only 48.7% of Latvian respondents declared a single specialty and 38.7% did not state any specialty. Fortunately for our study, most of respondents (82.2%) treat/see at least weekly elderly patients. Most Romanian doctors (78.4%) see elderly patients on a daily basis, while nearly half of the Latvian doctors (46.7%) see elderly patients weekly. 82.43% of respondents were aware of the functional decline concept. It is notable that all Latvian doctors stated they were aware of the concept of functional decline. Slightly fewer respondents declared awareness of "Frailty" (78.9%). Interestingly, all Latvian Doctors declared they were aware of the concept of frailty. All Latvian doctors declared that functional decline assessment "does not apply to their field of practice". Most Romanian respondents stated they did not know any scales (35.46%).

Overall doctors present low levels of health literacy on both functional decline related to ageing and frailty. Table 2 below presents a summary based on the conceptual distinctions of health literacy.

TABLE 2. Summary of responses

Health literacy		Functional decline	Frailty
Awareness	General knowledge	Overall, 82.43% of respondents were aware of the functional decline concept. It is notable that all Latvian doctors stated they were aware of the concept of functional decline.	Slightly fewer respondents declared awareness of "Frailty" (78.9%). Interestingly, all Latvian Doctors declared they were aware of the concept of frailty.
	Scales	All Latvian doctors declared that functional decline assessment "does not apply to their field of practice". Most Romanian respondents stated they did not know any scales (35.46%). Overall, **only 53 respondents (17.79%)** were aware of at least 1 scale for assessing functional decline, and they were all Romanian. Only 37.25% of respondents were at least to some extent, familiar with FAM. 11 Romanian respondents did not check this answer. The familiarity with other scales relevant for functional decline was below 50%.	All Latvian responders answered "does not apply". Overall, only 48 respondents (16.11%) were aware of at least 1 scale for assessing frailty, and they were all Romanian.
Access	Source	The internet (54.7%) and professional training (51.7%) appear to be the main sources for information on functional decline.	Professional training (69.1%) and Internet (65.1%) seem to be the main sources of information.
	Easiness of access	Most respondents (53.36%) declared it is easy or very easy for them to access information on age-related functional decline.	Most respondents (177 – 59.40%) found it easy or very easy to access information on age-related frailty
Understand	Own declaration	most respondents (177 – 59.40%) found it easy or very easy to access information on age-related frailty	Most respondents (201 out of 298 valid answers – 67.45%) found it easy or very easy to understand the concept of age-related frailty.
	Define	The most common view among the interviewed doctors was that functional decline corresponds to "all the above" definitions (58.38%) which, as	The most common view among the interviewed doctors was that frailty corresponds to "all the above" definitions (64.09%) which, as well, reflect

		well, reflect a correct knowledge on the subject matter.	a correct knowledge on the subject matter.
	Understand already accessed information	Most respondents (176 out of 294 valid answers – 59.86%) found it easy or very easy to understand information they have accessed on functional decline related to ageing.	Most respondents (172 out of 294 valid answers – 58.50%) found it "easy" or "very easy" to understand information they have accessed on frailty
Appraise	Reversibility	The majority of the answers asserted that pre-frailty and frailty are not reversible conditions (38.23%), which reveals a rather low knowledge on the subject matter. Out of 226 subjects who gave an opinion on the reversibility of pre-frailty/frailty (other than "I do not know"), a number of 33 (14.60%) had declared they were not aware of the concept!!	
	Judge relevance	Out of 293 respondents, 225 (76.79%) considered age-related functional decline and its assessment relevant in their practice. Out of the 223 doctors who considered age-related functional decline and its assessment relevant in their practice, 28 (12.44%) had stated they were not aware of the concept! Most of the respondents (166 out of 298, i.e. 55.70%) found functional decline and its assessment "relevant" or "very relevant" for their practice. We found that out of the 255 who gave an opinion on the relevance of functional decline for their practice, 29 (11.37%) had stated they were not aware of the concept of functional decline!	Most respondents (160 out of 298, i.e. 53.69%) found frailty and its assessing "relevant" or "very relevant" for their practice. Out of 257 respondents who gave a definite opinion on the relevance of frailty, 37 (14.40%) had declared they were not aware of the concept of frailty!
	Gain knowledge	Most respondents (147 out of 294 – 50.00%) gave "high" or "very high" priority to gaining knowledge on age-related functional decline.	Most respondents (208 out of 293 – 70.99%) gave "low" or "very low" priority to gaining knowledge about frailty, in opposition to the trend emphasized in the answers to the same (above) question, concerning the age related functional decline (?). In fact, this "low priority" option was the choice of

				all Latvian respondents!
	Usefulness of measurement tools			
Apply	General knowledge		Overall, the answers revealed that the great (60–80%) majority of the elders are accompanied to the medical visit by their family (117 such answers = 61.90% of the respondents).	
	Healthcare	Signs or symptoms	Age-group: Respondents declared the most frequent answers to this question were: 60-70 years (38.10%) and 50-60 years (27.89%).	Most respondents selected the option "50-60 years" age group (35.47%) and "60-70 years" age group (35.14%). We consider these answers reflect a low level of literacy on the subject.
		Criteria observed:		Self-reported exhaustion was considered by most respondents (64.1%) as the basic criterion for frailty.
		Assessment	The overwhelming majority (240, i.e. 82.76%) of respondents stated they do not assess functional decline and frailty.	
		Most frequent conditions assessed	According to the answers provided by our respondents, the most frequent health problems in elderly (80-100%) were: cardio-vascular disorders (59.73%), mental/psycho-cognitive disorders (52.01%) and metabolic ones (52.01%). Surprisingly the neuro-/locomotor problems are placed, according to the collected answers on the penultimate place as frequency. In fact, no Latvian respondent indicated any neuro-/locomotor problem at all.	
	Disease prevention and health promotion	Measures to prevent functional decline and frailty related to ageing	The most frequent answer was that all mentioned measures were adequate (61.1%), which reflects reliable good level of literacy on the subject matter. The mentioned measures were: • Intake of nutritional supplements and/or drugs with different anti-abiotrophy/ anti-ageing properties • Practicing physical activity regularly • Having/adopting good nutrition habits (healthy diet - Mediterranean type) • Staying active in the social environment • Prevent and/or fight against di-stress	
		Health promotion measures. How often do you	The most frequent answer was "once every 6 months" (183 out of 296 – 61.82%). It is notable that all Latvian doctors responded "once every 6 months".	

		experience patients having/adopting and promoting a healthy lifestyle to prevent/delay the onset of the functional decline and frailty and/or mitigate its consequences?	
		Adherence to treatment of patients	Respondents generally characterized their patients' adherence to treatment as moderate (31.40%) or quite high (37.20%). After the cross-tabulation, the most frequent answers were overall the same, but reversed as the order of frequency: quite high and moderate.
		Factors to increase adherence	The most common opinions were that psycho-cognitive problems (253 answers, 84.9%) and very severe physical disability (249 answers, 83.6%) decrease adherence to therapy, while education (250 answers, 83.9%) and trust in the health systems (223 answers,74.8%) increase adherence to therapy – which is correct, thus revealing a very good level of literacy on the subject matter.