ORIGINAL RESEARCH

Leadership competencies among male health professionals in a Western Balkan country

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Abstract

Aim: Our objective was to assess the *current* and the *required* level of leadership competencies among male health professionals in Albania, a country which is characterized by an intensive process of emigration of the health workforce in the past few decades.
Methods: This was a cross-sectional study carried out in Albania in June-November 2018 including a nationwide representative sample of 132 male health professionals working at different health institutions at both central and local level in Albania (mean age: 41.4±10.1 years; overall response rate: 88%). A structured 52-item questionnaire was administered to all male health professionals aiming at self-assessing the *current* level and the *required* (necessary) level of leadership competencies for their actual job positions. Answers for each item of the instrument ranged from 1 ("minimal competency level") to 5 ("maximal competency level"). An overall summary score (range: 52-260) and a subscale summary score for each domain were calculated for both the current and the required leadership competency levels. Paired sample t-test was used to compare the overall mean scores and the subscale mean scores of the current level and the required level of leadership competencies among male health professionals.
Results: Mean value of the overall summary score of the instrument was lower for the *current* leadership competency level compared with the *required* leadership competency level (137.6±8.7 vs. 140.7±21.2, respectively; P=0.02). Mean difference between the required and the current level of leadership competencies was higher for male health professionals working in top managerial positions and those working in urban areas of Albania.
Conclusion: This study informs about the current and the required level of leadership competencies among male health professionals in Albania, a transitional country in the Western Balkans. Policymakers and decision-makers in Albania and other countries in the European region should be aware of the existing gap between the required and the current level of leadership competencies among health professionals operating at all levels.

Keywords: Albania, competency level, male health professionals, public health leadership, Western Balkans.

Conflicts of interest: None.

Introduction

Several competency frameworks have been established in the past decades in order to assess public health leadership and medical leadership competencies in different countries (1-4). All of these instruments consist of the core principles and concepts of leadership (5,6). However, most of the existing frameworks assessing leadership competencies in the field of medicine and public health are quite broad and non-specific enough. As a matter of fact, such general frameworks do not allow for an appropriate assessment of the level of leadership competencies, as a major requirement for modification and fine-tuning of the educational curriculum and training models for public health professionals (7).

Based on these considerations, in the past few years, it has been successfully developed a new and more specific public health leadership competency framework aiming at promoting considerably the competency-based European public health leadership curriculum (7). This competency framework was part of the "Leaders for European Public Health (LEPHIE) Erasmus Multilateral Curriculum Development Project", which was supported by the European Union Lifelong Learning Programme (7). This framework has been already adapted and used in the Albanian context (8,9).

Albania is a post-communist country in the Western Balkans, which has experienced a rapid demographic and epidemiological transition in the past few decades (10). Currently, non-communicable diseases (NCDs) and its associated risk factors constitute the highest burden of disease in Albania (10). Hence, according to the estimates of the Global Burden of Disease, the crude mortality rate from the overall NCDs in Albania in 2016 was about 731 (95%CI=646-804) deaths per 100,000 population (11). Almost 94% of Albanian people died from NCDs in 2016 (11). Furthermore, about 84% of the overall disease burden in 2016 was attributed to the NCDs. For the same year, the burden of NCDs was estimated at about 22,260 (95%CI=19,380-25,280) DALYs per 100,000 (11). A whole range of risk factors are currently contributing to the NCD situation in Albania. Yet, the top three leading factors responsible for the disease burden in the Albanian population include the arterial hypertension, nutritional-related risks and smoking (11).

The Albanian health system is currently facing a multitude of challenges including the sufficiency and sustainability of health financing mechanisms in line with the ongoing reforms in all sectors (12). Furthermore, out-of-pocket payments still constitute almost half of the overall health expenditure in Albania and bear significant impoverishing effects upon the poorest and vulnerable and marginalized population categories. Also, human resources for health is another issue which currently represents a tremendous challenge (12) given the unabated brain drain from Albania to the Western countries, mainly to Germany which has become particularly attractive in the past few years for young physicians and nurses.

In the context of an intensive process of emigration of the health workforce in the past few years, our aim was to assess the *current* and the *required* leadership competency level of male health professionals in Albania, using an internationally valid instrument, which has been already applied in Albanian settings (8,9).

Methods

A cross-sectional study was carried out in Albania in June-November 2018 including a nationwide representative sample of 132 male health professionals working at different health institutions pertinent to

both the central level (Institute of Public Health, Regional Health Directorates, University Hospital Centre "Mother Teresa", and Health Insurance Fund) and local level (primary health care services, and regional hospitals). Initially, 150 male health professionals were targeted for recruitment; of these, 18 individuals did not participate. Hence, the final study sample consisted of 132 male health professionals, with an overall response rate of: 132/150=88%.

A structured questionnaire was administered to all male health professionals included in this survey. The questionnaire aimed at self-assessing the *current* level of leadership competencies and the *required* (necessary) level of leadership competencies based on the actual job position of health professionals. The questionnaire included 52 items categorized into the following eight competency domains (subscales) (7): i) systems thinking; ii) political leadership; iii) collaborative leadership: building and leading interdisciplinary teams; iv) leadership and communication; v) leading change; vi) emotional intelligence and leadership in team-based organizations; vii) leadership, organizational learning and development, and; viii) ethics and professionalism.

Possible answers for each item of each domain/subscale of the leadership instrument ranged from 1 ("minimal competency level") to 5 ("maximal competency level"). An overall summary score (range: 52-260) and a subscale summary score for each domain were calculated for both, the *current* level of competencies and the *required* level of competencies. Furthermore, the gap between the required (necessary) and the current level of leadership competencies was calculated for each participant, as a difference between the summary score of

the required level and the current level of leadership competencies.

Of note, the leadership instrument was validated since 2014 in a sample of health professionals operating in Tirana (8) and, after the respective cross-cultural adaptation, this tool was subsequently administered to a nationwide sample of male and female health professionals in Albania (9).

In addition to the leadership competency level, the structured questionnaire inquired about some basic demographic data (age of male health professionals and workplace: urban areas vs. rural areas); work experience (expressed in full years); main degree obtained (health sciences including medicine, public health, nursing, pharmacy, or dentistry vs. other degrees including economics, social sciences, law, engineering, or other disciplines; this variable was dichotomized in the analysis into: health sciences vs. other diploma); and the current job position (trichotomized in the analysis into: high, middle and low managerial level).

This study was approved by the Department of Public Health, Faculty of Medicine, University of Medicine, Tirana, Albania.

The distribution of age and working experience among male health professionals included in this study was presented by use of the measures of central tendency and dispersion (mean values and standard deviations). On the other hand, absolute numbers and their respective percentages were employed for presentation of the distribution of workplace (urban vs. rural areas), main degree obtained (health sciences vs. other degrees) and the job position (top, middle and low managerial positions) of health professionals. Cronbach's alpha was employed to assess the internal consistency for both the current level and the required level of leadership

competencies (13). Conversely, paired sample t-test was used to compare the overall mean scores and the subscale mean scores of the current level of competencies and the required level of competencies among male health professionals included in this survey. A p-value of ≤0.05 was considered as statistically significant. All statistical analyses were performed by use of the Statistical Package for Social Sciences (SPSS, version 19.0).

Results

Mean age in this nationwide representative sample of male health professionals (N=132) was 41.4±10.1 years (Table 1). In turn, mean working experience was 14.8±9.4 years. About 71% of study participants were working in urban areas

of Albania, whereas the remaining 29% were operating in rural areas (mainly in Tirana, but also in the other districts of Albania).

About 87% of participants had obtained their main degree in health sciences (including medicine, public health, nursing, pharmacy, or dentistry), whereas further 13% had obtained their main degree in other fields (including economics, social sciences, law, engineering, or other disciplines). Regarding job position, about 34% of health professionals were operating in high managerial positions; 44% in middle managerial positions; and the remaining 22% were working in low managerial positions (Table 1).

Table 1. Demographic factors and characteristics of the workplace in a nationwide representative sample of 132 male health professionals in Albania, in 2018

Numerical variables	Mean	Standard deviation
Age (years)	41.4	10.1
Working experience (years)	14.8	9.4
Categorical variables	Number	Percentage
Place of work:		
Urban areas	94	71.2
Rural areas	38	28.8
Total	*132*	*100.0*
Diploma (main degree):		
Health sciences	115	87.1
Other degrees	17	12.9
Job position:		
High managerial level	45	34.1
Middle managerial level	58	43.9
Low managerial level	29	22.0

The internal consistency of the overall scale of the leadership instrument (52 items) was Cronbach's alpha=0.87 for the current competency level and Cronbach's alpha=0.95 for the required competency level (Table 2). For the current

competency level, Cronbach's alpha was the lowest for the "ethics and professionalism" domain (0.50) and the "leadership, organizational learning and development" subscale (0.51) and the highest for the "political leadership"

domain (0.93) followed by the "collaborative leadership" subscale (0.89). Likewise, for the required competency level, Cronbach's alpha was the lowest for the "ethics and professionalism" domain (0.67) and the highest for the "political

leadership" subscale (0.90) and the "collaborative leadership" subscale (0.86). Overall, Cronbach's alpha was higher for five of the domains of the required competency level compared with the current competency level.

Table 2. Internal consistency of the leadership competency instrument in a nationwide sample of male health professionals in Albania in 2018 (N=132)

Domain (subscale)	Cronbach's alpha	
	Current competency level	Required competency level
Overall scale *(52 items)*	0.87	0.95
Systems thinking *(7 items)*	0.69	0.75
Political leadership *(8 items)*	0.93	0.90
Collaborative leadership: building and leading interdisciplinary teams *(5 items)*	0.89	0.86
Leadership and communication *(7 items)*	0.56	0.84
Leading change *(6 items)*	0.65	0.76
Emotional intelligence and leadership in team-based organizations *(6 items)*	0.82	0.81
Leadership, organizational learning and development *(7 items)*	0.51	0.75
Ethics and professionalism *(6 items)*	0.50	0.67

Table 3 presents mean summary scores of each domain of the leadership instrument for both the current and the required competency level. Mean value of the overall summary score for the 52 items of the instrument was somehow lower for the current competency level compared with the required competency level (137.6±8.7 vs. 140.7±21.2, respectively; P=0.02). Most of the subscales' scores were

significantly higher for the required competency level than for the current competency level, except for the "emotional intelligence and leadership in team-based organisations" and "leading change" domains. Conversely, mean scores of the "ethics and professionalism" subscale were similar for the current and the required leadership competency level (Table 3).

Table 3. Summary scores of the overall scale and subscales for the *current* and the *required* leadership competency level of Albanian male health professionals in 2018 (N=132)

Domain (subscale)	Mean values ± standard deviations		P-value*
	Current competency level	Required competency level	
Overall scale *(52 items)*	137.6±8.7	140.7±21.2	0.019
Systems thinking *(7 items)*	20.8±1.7	21.9±3.2	0.004
Political leadership *(8 items)*	19.5±4.7	20.2±5.0	0.001
Collaborative leadership: building and	11.4±3.0	12.6±3.5	<0.001

leading interdisciplinary teams (*5 items*)			
Leadership and communication (*7 items*)	16.2±2.1	17.4±3.9	<0.001
Leading change (*6 items*)	17.5±2.2	16.8±3.1	0.005
Emotional intelligence and leadership in team-based organizations (*6 items*)	18.4±2.4	16.9±3.3	<0.001
Leadership, organizational learning and development (*7 items*)	16.3±2.0	17.5±3.3	<0.001
Ethics and professionalism (*6 items*)	17.5±2.0	17.6±2.6	0.603

[*] Paired sample t-test.

The gap of leadership competency level (mean difference between the required and the current level of competencies) was higher for male health professionals working in top managerial positions (mean difference: 4.1) compared to those operating in middle managerial positions (mean difference: 3.2) and, particularly, individuals working in low managerial positions (mean difference: 1.5). Furthermore, the gap in leadership competencies was higher among health professionals working in urban areas compared with their rural counterparts (mean differences: 3.6 vs. 2.0, respectively) [data not shown in the tables].

Discussion

Main findings of the actual study consist of a higher self-perceived level of the required (necessary) leadership competencies than the current (existing) level of leadership competencies in this nationwide representative sample of male health professionals in transitional Albania.

This finding resembles a previous report which consisted of application of the same instrument in a nationwide representative sample of male and female health professionals in Albania in 2014 (9).

The internationally valid instrument for assessment of leadership competencies in the current study had an overall reasonable internal consistency, particularly for the required (necessary) leadership competency level. This was also the case in the previous study conducted in 2014 (9).

Interestingly, the mean difference between the required and the current level of leadership competencies was higher for male health professionals working in top managerial positions. This finding points to the urgent need for specific leadership training of public health professionals operating in key managerial positions in Albania.

Furthermore, the mean difference between the required and the current level of leadership competencies was higher for male health professionals working in urban areas of Albania. This finding is somehow intuitive considering the pressure and demands for high-quality services in urban areas, especially in large cities of Albania (particularly in Tirana).

In the previous study, which was conducted in Albania in 2014 employing the same measuring instrument (7,9), there were included 162 men aged 44.9±10.6 years and 105 women aged 44.4±9.9 years (9). In this sex-pooled sample of male and female health professionals in Albania surveyed in 2014, the mean value of the overall summary score for the 52 items of the leadership instrument was 138.4±11.2 for the current leadership competency level compared with 159.7±25.3 for the required leadership competency level (P<0.001) (9). Also, most of the subscales'

scores of the leadership instrument in the study conducted in 2014 were significantly higher for the required than for the current leadership competency level (9), a finding which is somehow similar to our current study conducted in 2018.

Competencies in the area of public health leadership are considered essential components for the performance and ongoing activities of health professionals at all levels of health care services in a wide range of settings and organizational structures (14). As described elsewhere, developing effective leadership is vital in most of the European countries given the considerable financial pressures of the public health systems and their need to deliver more services in line with declining resources and financial constrains (15).

In the context of Albania, the curriculum of both undergraduate and postgraduate public health programs does not adequately promote leadership skills and competencies for future health professionals (9). However, a similar trend is observed in many other countries where teaching of leadership is still not common in public health training programmes (14,15). This is especially the case in countries experiencing intensive public health reforms including Albania. Hence, there is an urgent call for a considerable investment in leadership training for public health professionals worldwide (16).

This study may have several limitations including the study design, sampling strategy and the information obtained. Regarding the possibility of selection bias, a nationwide representative sample of male health professionals was included, which is comforting. Concerning the instruments of data collection, this study used an internationally standardized instrument (7), which had been previously validated in Albania (8) and subsequently applied to a larger sample of health professionals (9). Overall, the instrument used for the measurement of leadership competencies indicated good internal consistency. Nevertheless, the internal consistency was not high enough for some subscales of, particularly, the current leadership competency level. Regarding the possibility of information bias, there is no reason to assume differential reporting in the actual or the required levels of leadership competencies among male professionals involved in this study. Nonetheless, the possibility of information bias cannot be entirely excluded, as it is never the case with this type of surveys. Finally, findings from cross-sectional studies are not assumed to be causal and should be interpreted with caution.

In conclusion, regardless of its potential limitations, this study provides recent information about the current and the required level of leadership competencies among male health professionals in transitional Albania, based on an internationally valid instrument, which has been previously validated and administered in Albanian settings. As convincingly argued (7,9), application of this useful instrument enables the recognition of possible gaps in the level of existing leadership competencies and the required (necessary) level of leadership competencies, which will eventually inform the public health curricula about necessary content adjustments. Therefore, policymakers and decision-makers in Albania and other countries in the European region should be aware of the existing gap between the required and the current level of leadership competencies among health professionals operating at all levels.

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