

## MANAGERIAL STYLES ASSOCIATED WITH PUBLIC HEALTH LEADERSHIP COMPETENCIES

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**Introduction:** Modern challenges (the COVID-19 pandemic, war activities, economic crisis, etc.) require a high level of professionalism in solving public health problems. At the same time, the importance of leadership at all levels of health care is increasing, both in the provision of individual medical services and in ensuring population health.

Leadership competencies in public health can be influenced by various factors, especially educational ones. Our previous studies have shown that management styles can be considered as factors affecting overall management effectiveness, so our next step was to determine their connections with the corresponding competencies.

**The aim:** To identify leading managerial styles that are associated with having public health leadership competencies.

**Materials and methods:** A study on self-assessment of managerial styles was conducted on a sample of 192 healthcare workers, healthcare managers and students of higher medical education. Leading management styles were evaluated according to the methodology of the World Health Organization (<https://apps.who.int/iris/handle/10665/205407>), in which 12 distinct managerial styles are distinguished: supportive, rescuing, normative, prescriptive, problem-solving, task-obsessive, innovative, bohemian, resilient, sulking, assertive, aggressive

Managerial styles are interrelated with management functions and overall managerial effectiveness score. Using general information about the respondents and their score of overall management efficiency, the surveyed were divided into groups with a sufficient level of public health leadership competencies (n=109) and without it (n=83).

Processing of the obtained results was carried out using methods of logistic regression and factor analysis (varimax rotation of normalized data) using TIBCO Statistica™ Trial Download for Windows (<https://www.tibco.com/resources/product-download/tibco-statistica-trial-download-for-windows>) software.

**Results:** Among the leading management styles, in which the largest share of respondents with a sufficient level of public health leadership competencies was observed - supportive (56.0%) and problem-solving (33.9%), while none with the aggressive (0%) or sulking (0%) styles as dominant ( $p < 0.001$ ).

The conducted logistic regression analysis showed that the chances of having a sufficient level of public health leadership competencies increase with the use of a supportive management style (OR=1.49; 95% CI 1.23-1.80), problem-solving style (OR=1.43; 95% CI 1.13-1.81) or normative style (OR=1.22; 95% CI 1.04-1.41). As a result of the factor analysis, four factors were selected from the general list of managerial styles, which determined the total variance by 65.6%. The first factor, which accounted for 31.3% of the total variance, included supportive style and problem-solving style (the second one had a higher factor loading), allowing it to be defined as "support in problem-solving". The second factor included three managerial styles (listed in order of decreasing factor loading) – prescriptive, aggressive and task-obsessive. According to the content, this factor was defined as «practical ingenuity», its influence on the total variance is 14.5%. The third factor, accounting for 10.6% of the variance, consisted of only flexible managerial style and therefore was named «flexibility». The fourth factor was formed by two styles – bohemian and innovative, which have the generation of new ideas in common, so they were united in the factor which is called «ideas generation».

**Conclusions:** The leading managerial styles associated with public health leadership competencies are supportive, problem-solving, and normative styles. Since every leader uses a different combination of managerial styles, with the help of factor analysis it was determined that the leading factors related to management and contributing to the acquisition of a sufficient level of public health leadership competencies include: support in problem-solving, practical ingenuity, flexibility and ideas generation (total factor loading = 65.6%).

Leadership competencies in public health, which are formed under the influence of these factors, can be formed based on the natural abilities of the individual, with the help of targeted influence, both of the person himself (self-improvement, self-study, etc.) and with the help of the system of formal and informal education.

**KEY WORDS:** public health, leadership competencies, managerial styles