

Creating terrenkur system in an industrial city

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Background: Physical activity as a therapeutic method of functional recovery is used to treat many diseases. In 1885, the German physician Max Ertel proposed to introduce a method of healing the body (especially in case of cardiovascular diseases and obesity) and coined the term "terrenkur" (terrain - "terrain" from French and Kur - "treatment" from German). Terrenkur, which is defined as distance, time, and angle dosed walking, is an accessible, natural and a widespread form of physical activity. Terrenkur was developed, launched and implemented in one of our city parks in 2019-2020. One alternative method of rehabilitation is Nordic Walking which helps to increase the number of muscles involved in movement and increase physical and aerobic load.

Purpose: To create a terrenkur system in twelve parks in Lviv (Ukraine), ensuring maximum accessibility for residents and guests of the city to terrenkurs.

Results: We developed a methodology for the terrenkur organization and proposed a system of from 3 up to 7 trails laid out in each park (evenly placed in different parts of the city). It is the first terrenkur system in the world located in a non-recreational area. Organizational, methodological and preparatory work was carried out by a team of professors and staff from different universities, practicing physicians, rehabilitologists and parks workers.

When **creating the routes**, we divided them into three types based on the level of complexity:

- 1) an easy route - from 500 meters to 1500 meters, with minor terrain changes, almost no difference in elevation;
- 2) a moderate route - from 1500 to 2500 meters, the frequency and difference of terrain inequalities increases, includes sections with a variable walking pace;
- 3) difficult route – more than 2500 meters, significant terrain changes, many sections with a variable walking pace.

In each park the terrenkur systems are equipped with information boards at the beginning and intermediate points of the routes, containing a map, information about healthy and Nordic Walking details, a brief history of the path, places of active recreation, the surrounding area, a general map of the city, which indicates the parks with available routes. The trails are marked using columns, which contain the information about the directions and distance covered from the beginning of each route. A unified system of numbering of all the trails has been developed, where the first digit in a number means the level of difficulty of the route, and the second, respectively, the serial number in the individual park. For example, routes No11, No12 or No13 are easy routes, No21, No22, No23 are moderate routes and No31, No32 are difficult routes.

On September 30, 2023, we held a charitable event – «DAY OF HEALTH FOR VICTORY» in the park where terrenkur was launched. During the event, participants had the opportunity to try different types of physical activity (terrenkur and Nordic walking), listen to lectures about a healthy lifestyle, as well as check their health status and determine their cardiovascular risks.

Conclusions: Terrenkur can be considered as an affordable and safe method of primary and secondary prevention of cardiovascular pathology and rehabilitation for other ailments. Now that is especially useful for internally displaced persons and soldiers who have returned from the battlefield and have post-traumatic stress disorder. Implementation of this method in industrial cities does not require large financial expenses and can promote patient wellbeing.

Please contact for additional information or future cooperation:

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