

## **FEATURES USING COLOR IN THE INTERIOR OF A MOBILE HOSPITAL**

***Abstract:** We determined the effect of color on physical well-being. The features of the use of color in different functions spaces, focusing on its physiological effects. Determine the range of colors that are best suited for interior mobile hospital.*

***Keywords:** color, physiological performance, interior, mobile hospital.*

**Statement of the problem.** General condition of man-made and natural security in Ukraine unstable. Depreciation state of municipal infrastructure, more than 60% (accident networks, natural gas explosion, etc.). 17% Of Ukraine affected by flooding. The negative effects of floods and floods occur in 27% of the territory. In recent years, more frequent natural disasters (flooding, landslides, fire, cold), accompanied by loss of life. There is a high accident rate on the roads, in the last year in Ukraine in road accidents killed 4,600 people, and since independence - 137 thousand people, about half a million were injured. In this regard, the question arises of creating mobile hospitals that could respond quickly to emergencies.

Also there is the issue of regulating both mental and physiological state of the victims, which can be solved by means of medicine, as well as by the influence of the environment. Therefore, an important place is ranked interior design and use of color in particular.

**Analysis of recent research and publications.** Aristotle wrote: "The colors in their pleasures correspondences can treat each other like musical harmony and be proportional to the reciprocal of the system." Medic V. Bekhterev directly stated: "Cleverly selected range of colors capable salutary effect on the nervous system than other medicine." The first thorough scientific work on color appeared in 1810 and belonged to the famous pen IV Goethe. He locked the color spectrum in a circle. Sharply contrasting colors that are located opposite each other (eg, purple and yellow), he called complementary. [1]

Scientists are still arguing about the mechanism of the effect of color on human psychology. Many believe that color can affect the body directly through physiology (L. Orbeli, S. Kravnova take for granted the effect of color on the autonomic nervous system). There are also experiments neurologist Charles Fere, who studied the effect of light color on the performance (measured by hand dynamometer evidence). Frilinh G. and C. Auer (author of "Spider-color-space") wrote that "all color representation rights - of unnatural relations". [4] It should also be noted labor K. Degtyarev (article "History of Color") and F. Stefanaska-Hoanha ("Study of the physiological changes in the body with different color light").

**The wording of Article goals.** Should investigate the effect of color on the physical and psychological state of the victims in emergencies, disasters. Determine what colors are best used in mobile hospitals.

**The main part.** Specialist Studies Hord Coplan Macht + Spevco presented the design of a new mobile hospital that can quickly razhortaty boundary conditions in time. The basis of the hospital make up 58 truckloads that can be connected together,

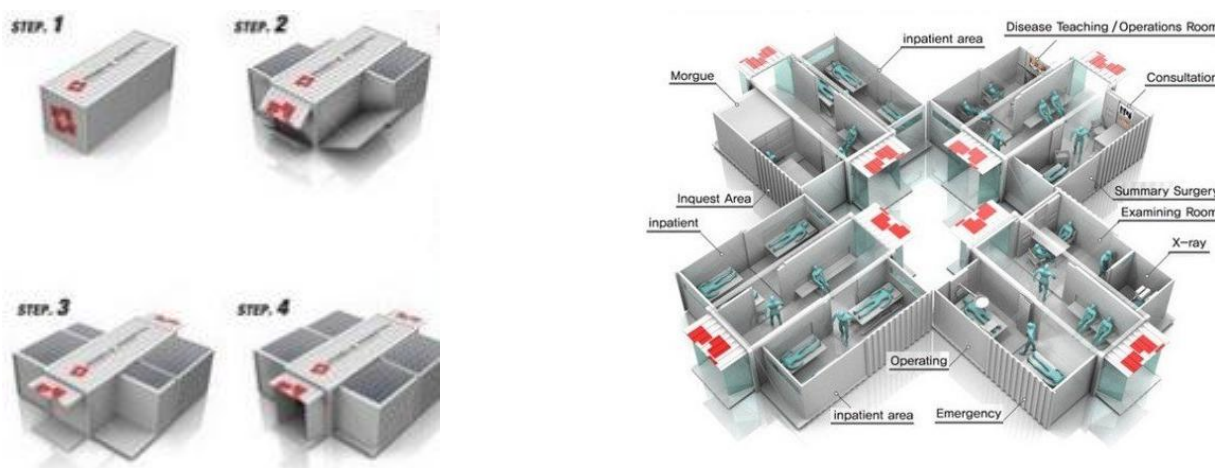
creating a single space. Mobile hospital is designed for 48 cities. It has everything you need for treatment and operations. According to the sponsors, all the hospital as a whole can be rolled together and moved to a new place in 2 weeks, informs [Arch Daily](#) . (Fig. 1).



*Figure 1. Mobile hospital, developed by studio Coplan Macht + Spevco (2010)*

Another mobile hospital established designer Kukil Khan, the container takes place in medical patterns three times more of their original size (Fig. 2). Container itself may contain beds and necessary equipment. Could even combine four modules for minihospitalyu with four wings. They can be delivered using helicopters in any place, and decay in just a few hours. [6].

The victims in emergency situations or accidents need not only medical but also psychological help. Psychologists developed the concept that you can forget about your pain or grief, if attention is focused on something else.



*Figure 2. Mobile hospital transported helicopter. Kukil Khan.*

In fact, doctors have long used the elements of color therapy: using the "rainbow" and the spectrum was treated in Egypt Kytyi, India and Persia. For example, strong stimulation was filmed in a patient with attacks of violence, when it was placed in a room with blue walls, blue light. The famous Celsus used to treat wounds black, green, red or white patches, depending on the type of wound. Avicenna was a special atlas, which described the relationship between Kohl, human temperament and health. He stated: Bright color helps digestion, red creates an optimistic mood and increases blood tic (he covered his patients chervonnoyu cloth) yellow - reduces pain, reduces inflammation. [2]

Table 1

**The physiological effect of color**

Color	in chromotherapy	Medical Branch
1	2	3
Red	<ul style="list-style-type: none"> <li>-D It helps stimulating effect on the krovoobbiyu;</li> <li>-Increases the hemoglobin in the blood and thereby prevents vyneknennyu anemia;</li> <li>-Boosts immunity;</li> <li>-Removes stagnation;</li> <li>-Helps release heat;</li> <li>-Regulates the activity of the liver and kidneys;</li> <li>-Promotes muscular relaxation;</li> <li>-Helps with menstrual irregularities and stimulate sexual activity.</li> </ul>	Ur olohiya Cardiology Gynecology Imunnolohiya Neurology
Orange-chevyy color	<ul style="list-style-type: none"> <li>It helps ukriplyayuchu-D effect on the viability of the organism;</li> <li>-Provides oxygen spleen and pancreas;</li> <li>-Improves krovoobbih, digestion, trophic skin;</li> <li>-Promotes clean vessels;</li> <li>-Increases appetite;</li> <li>-Promotes the regeneration of the nervous and muscular tissues;</li> <li>-Stimulates the gonads;</li> <li>-It improves mood, reduces depression.</li> </ul>	Traumatology Urology Psychiatry Hastroentero-logy Cardiology Dermato-Venereology
Yellow	<ul style="list-style-type: none"> <li>-D It helps cleansing effect on the digestive system, liver and skin;</li> <li>-Stimulating the gastrointestinal tract, pancreas, liver,</li> <li>- It promotes bile flow;</li> <li>- Activates the autonomic nervous system;</li> <li>- Restores reserves of minerals and reduces acidity in the body.</li> </ul>	Hastroentero-logy Urology Dermato-Venereology Neurology
Green	<ul style="list-style-type: none"> <li>-D It helps both refreshing and soothing effect on the body, exhibits antiseptic and antimicrobial properties;</li> <li>-Strengthens muscles and tissues;</li> <li>- Provides a stimulating effect on the pituitary gland;</li> <li>- Beneficial effect on the eyes;</li> <li>-Relieves bronchospasm;</li> <li>-There is an excellent sedatives for chronic diseases.</li> </ul>	Infectious department Neurology Otolaryngo-logy
Purple-ing color	<ul style="list-style-type: none"> <li>-With nyzhuye temperature reduces pain;</li> <li>- Has a beneficial effect on people with busy hectic lifestyle, insomnia, migraines and depression;</li> <li>-Enhances the immune system.</li> </ul>	Oncology Traumatology Psychiatry Imunnolohiya

1	2	3
Blue-ing color	-With aspokoyuye pain is refreshing and vasoconstrictor effect; -Inhibits inflammation, shows antibacterial and antipyretic effects; -Calms, reduces blood pressure; -Relieves headache; -Reduces appetite.	Infectious department Cardiology Gastroenterology Neurology
Blue	In-company in the respiratory system, so it is particularly effective in bronchitis, pneumonia and asthma; -Reduces inflammation of the cecum (appendicitis) and tonsils; -Regulates the activity of the thyroid gland; -Helps stop bleeding, rapid healing and scarring; -Provides analgesic effect in all sorts of pain, management effects on the pituitary gland, the parasympathetic nervous system; -Has antibacterial properties; -Enhances the immune system.	Otolaryngology Pulmonology Gastroenterology Traumatology Infectious department Endocrinology
White	-P idvyschuye force energy; -Normalizes the activity of the central nervous system; Positive effect on the activity of the endocrine glands.	Neurology Endocrinology

The main offices of mobile hospital during emergencies and disasters are: traumatic surgery, psychiatry, infectious disease clinic, in some cases, gastroenterology, pulmonology and otolaryngology.

Comparing the study can be summarized that:

- For the best use of Traumatology purple, blue or orange colors and shades;
- For Psychiatry - purple or orange;
- For the infectious department - blue, blue and green;
- For Gastroenterology - yellow, orange, blue and light blue;
- For Pulmonology - blue;
- For Otolaryngology - blue and green.

In most cases, dominated by cool colors - blue, purple, green.

**Conclusions.** Investigation of the influence of color on physical and psychological health of victims during emergencies and disasters has shown that color has therapeutic and countervailing action.

Mobile hospitals are best colors such as blue, purple, green. When place the range on a white surface and dilute it with warm accents, we get the optimal formula of color in interiors mobile hospitals.

**Prospects for further research.** Planned to consider the proportions in which it is best to use colors in interiors medical facilities.

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### Анотація

*Лыжник Н.И. Особенности использования цвета в интерьерах мобильных госпиталей.*

*В статье устанавливается влияние цвета на физическое состояние человека. Исследуются особенности использования цвета в различных за функциями помещениях, ориентируясь на его физиологическое действие. Определяется цветовая гамма, которая лучше подходит для интерьера мобильного госпиталя.*

*Ключевые слова: цвет, физиологическое действие, интерьер, мобильный госпиталь.*

### Анотація

*Лижник Н.І. Особливості використання кольору в інтер'єрах мобільних госпіталів.*

*У статті встановлюється вплив кольору на фізичний стан людини. Досліджуються особливості використання кольору в різних за функціями приміщеннях, орієнтуючись на його фізіологічну дію. Визначається колірна гамма, яка краще підходить для інтер'єру мобільного госпіталю.*

*Ключові слова: колір, фізіологічна дія, інтер'єр, мобільний госпіталь.*