



# International Journal for Innovative Engineering and Management Research

A Peer Reviewed Open Access International Journal

www.ijiemr.org

**COPY RIGHT**



**ELSEVIER**  
**SSRN**

**2021 IJEMR.** Personal use of this material is permitted. Permission from IJEMR must be obtained for all other uses, in any current or future media, including reprinting/republishing this material for advertising or promotional purposes, creating new collective works, for resale or redistribution to servers or lists, or reuse of any copyrighted component of this work in other works. No Reprint should be done to this paper, all copy right is authenticated to Paper Authors

IJEMR Transactions, online available on 26th Feb 2021. Link :

<https://ijiemr.org/downloads/Volume-10/Special>

**DOI: 10.48047/IJEMR/V10/I03/53**

Title: **ARCHITECTURAL AND PLANNED SOLUTIONS OF MEDIEVAL HOSPITALS**

Volume 10, Issue 03, Pages: 230-232.

Paper Authors

**Abatova Shamsikamar**



USE THIS BARCODE TO ACCESS YOUR ONLINE PAPER

To Secure Your Paper As Per **UGC Guidelines** We Are Providing A Electronic Bar Code

## ARCHITECTURAL AND PLANNED SOLUTIONS OF MEDIEVAL HOSPITALS

Abatova Shamsikamar

Intern teacher

Department of Architecture and Project Organization of Rural Regions

**Abstract.** The purpose of this dissertation is to popularize the building of the first hospital built in Samarkand- Ibrakhim Timgachkhan “Bemoriston” from the scientific point of view and graphic restoration of its architecture, which is unique for the history and Architectural Science of this Uzbekistan, but has not been preserved until now, and entering it into scientific circulation

**Keywords.** the architectural-planned solution, medieval hospitals, courtyards, “Madrasai Dor ush-shifo”, “bemoriston”, waqf, “nimak bemoriston” and others.

### I. Introduction.

Thanks to our independence, under the head of state and initiative of the leadership of our Republic, the existing architectural monuments in various regions and historical cities of the country are preserved intact and repaired, a number of urgent and noble tasks, such as restoration, conservation and effective use of them for modern needs, adaptation to these needs, improvement of their environment, as well as determination and order storage of defense zones, are being addressed and implemented, respectively, by finding their solutions.

**The purpose and objectives of the article** are scientific analysis and summarization of the issues entered into the research subject and subject on the basis of our homeland and foreign samples and special literature, popularization of the medical cultural heritage of the XI–XII centuries in Samarkand on the basis of graphic restoration of the public hospital built in the city of Samarkand.

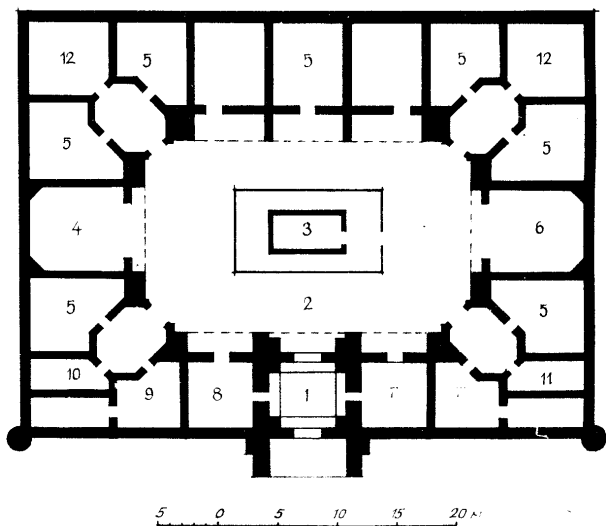
The building of historical hospitals formed in Islamic countries has a *courtyard* appearance according to the architectural-planned solution. *What is the reason for this?* That question naturally arises. *Courtyards in public hospitals were convenient to organize separate departments, depending on the*

*character of the patients.* This made it possible to treat individual types of patients separately from each other. In the past, hospitals were located close to or adjacent to other buildings, so it was not possible to provide them with the same large and green space in the city. This required the creation of indoor courtyards for patients to relax in the open air in the hospital courtyard, as well as to pray.

It is known that Central Asia, in particular Uzbekistan, has a hot and dry climate. Summer is long, there are a lot of sunny hot days. In such conditions, it is required to build patients' rooms in an elongated form, that is, the side of the walls facing outwards, as short as possible. Taking this into account, it was found that it is desirable to divide the sides of the patients' rooms in a 2:1 ratio in the Tarh [1]. However, taking into account both the necessary natural light and the fall of sunlight into the room, the ratio of the sides of the “Dor ush-shifo” cells in the city of Bukhara was obtained in 3:2 way (Figure 4).

The height of the rooms was determined in such a way as to depend on their function. For example, the height of the church is quite high, while the patients' cells are provided with spatial latitude and air volume with the closure of the upper porch form. The outer walls of the hospitals are solid and almost without windows. Light falling through the “topchan”

installed on their entrance doors to the cells of patients from the inner courtyard.



**4-picture. Tarh of “Madrasai Dor ush-shifo” in Bukhara. XII century.**  
 1- the entrance gate to the hospital; 2-the inner courtyard; 3-The Vault (sardoba); 4-the public room ; 5-the chambers of the patients; 6-the classroom; 7-the library; 8-the patient reception room; 9-the kitchen; 10-the pharmacy; 11-the doctor's room; 12-The room of the healers and doctors.

In order to ensure the sustainability of the “Bemoriston” (hospitals), the rulers who built and established them allocated special real estate to the hospitals as a “waqf” and appointed a special person, the “mutawwal”, which fairly manages and distributes the proceeds from these properties. [6] Part of the waqf income was used to keep the “bemoriston” buildings clean and repaired, while the rest was given as a monthly salary to the “bemoriston” staff.

In the composition of hospitals in some Islamic countries, in addition to inpatient treatment, there were also treatment departments-“dormitories” (similar to the current polyclinics), for those who were attending. Moreover, there were more kitchens, bathrooms and other auxiliary farm rooms.

The presence of a bath in the composition of hospitals was due to the fact that in addition

to bathing patients in it, some diseases could be treated with the help of a bath. For example, rheumatism, arthritis, arthrosis were effectively treated through bath therapy [5].

Therefore, such baths are found in some Eastern countries: Turkey, Iran, Iraq, Damascus, Central Asian hospitals [4]. The first hospital in Samarkand which we are seeing in this dissertation, Ibrakhim Timgachkhan “bemoriston”, has a small hospital - the “nimak bemoriston” department, which served for the treatment of patients [5].

As early as the IX–X centuries, Baghdad’s hospitals had multifunctional departments that treated many diseases. For example, they had general therapy and surgery departments. Each department had its own head physician and medical staff. The hospital’s chief physician was under general supervision and guidance, and the number of states were large, with experienced physicians. For example, the hospital headed by al-Razi had more than 20 doctors. [1].

In the X–XI centuries, in Khorezm and Movarounnahr, in addition to doctors with general medical education, highly qualified doctors began to work. Abu Rayhan al-Beruni wrote: “Here, there are remarkable changes in the ranks of our physicians, in particular: they define their knowledge and skills as a direction to individual types of diseases, either an eye physician or a surgeon, a broken-bones physician or a blood-receiving physician ”[5]. For such a separate disease, specialists have also found hospitals in Gurganj, Mevr and Hirat.

**Conclusion.** Historical information about the first hospital in Samarkand can be found in the waqf documents of the XI century. This waqf is a document about the establishment, allocation and construction of a hospital by the then ruler of Samarkand Ibrakhim Timgachkhan Karakhani. This document was taken from Samarkand to England by British corcholons and has been preserved until now.

It says the hospital, which is a “bemoriston”, is primarily for the oppressed, civilians and the disabled. Next to it was a

“nimak bemoriston”, which means a clinic (in modern parlance, a polyclinic). The history of the hospital was rectangular, with an inner courtyard, a spatially closed composition, an architectural environment detached from the environment, a single gate and a window. The hospital also operated during the winter. Treatment in the hospital is free of charge, that is, the care of patients and the activities of doctors are carried out from the account of funds of State foundations.

## REFERENCES

1. “History of Samarkand” (volume 1), Tashkent, "Science", 1971.
2. “History of Uzbekistan in documents”, Tashkent, “Science”, 1988.
3. Salmon Altai. “Islamic Religions and Discoveries”, Istanbul, 1993
4. Khodjiyev T.K, Khodjiyeva G. From the ethnic history of the Uzbek people. T.: University, 1995.
5. www.ziyonet.uz Electronic database of the Ministry of Higher and Secondary Special Education of the Republic of Uzbekistan on all topics.
6. [www.mahalladosh.uz](http://www.mahalladosh.uz)
7. [www.literature.uz](http://www.literature.uz) - literary site.
8. [www.pedagog.uz-pedagogika](http://www.pedagog.uz-pedagogika) - pedagogical site