

## **Letter to Editor. Psychiatric hospital architecture – selected problems of existing infrastructure**

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Numerous psychiatric hospitals in Poland are located in buildings that have been in constant use for many years and are often under conservator's protection. Some have never been adapted to the changing requirements set for health service facilities. Very often, no modernization works have been implemented despite the existing regulations that the time frame for hospital facilities is limited to 50 years, with the possibility of prolonging this period for another 50 years after general renovation.

Architectural research on built environment of hospitals commonly ignores psychiatric facilities. The practice of Evidence Based Design [1] has included in their decision making process related to aspects of design the issues related to reduction of stress levels in patients, family and personnel satisfaction, as well as the conditions of treatment and employment in hospitals. This has brought quantifiable results in the form of the reduction of personnel mistakes, reduction of stress levels experienced by patients, as well as reduction of the number of Hospital Acquired Infections [2].

The design process of built environment of psychiatric hospitals is governed by different therapeutic priorities and requires implementation of different methods of care-taking and guarding patients than in other hospitals. Moreover, specificity of hospitals of this type demands different architecture solutions throughout the entire complex, as well as in particular wards, interiors and their features.

Every piece of architecture represents a system of interconnected factors. They shape its form, determine the use of particular materials and the design of adequate functional arrangement. They allow for adjusting the building to a particular function. Hospitalization of inmates in psychiatric hospitals is affected by stressors stemming from individual's condition, as well as from surrounding built environment.

Facilities where psychiatric hospitals are located are often poorly adapted to the requirements related to the specificity of therapeutics of this type, which generates problems such as: self – and allo-aggressive behaviors, as well as negative events including escape, theft, sexual relations between patients, injuries suffered by patients resulting from the

conditions of existing infrastructure, lack of intimacy, privacy, and appropriate form of isolation. All those factors lower the quality of services offered to patients.

As a result of the prolonged use of particular locations, as well as lack of systematic renovations and modernizations, numerous Polish psychiatric hospitals demonstrate poor technical condition and a number of flaws. Among those are: damages to horizontal insulation, damaged window and door frames, bathrooms unadjusted to current regulations, lack of lifts, and incorrect topography. Many of them use connecting patient rooms, which is unacceptable both by the practice of hospital design, as well as by existing legal system [3].

Inadequate definition of space, the ways that particular rooms are being used and how the relations between them are exercised generate problems in successful implementation of therapy, diagnosis, and safety procedures. Inaccurate arrangement of functions within the building may hinder or completely obstruct the isolation of a sufficient number of rooms for patients who require the use of direct constraint. Hence, such patients are forced to live in rooms that are not adjusted to this purpose. This impedes exercising required control and safety, as well as providing intimacy and a sense of dignity for the patients. Due to the lack of space in patient rooms that are often beyond their capacity, patients stay in corridors, recesses in corridors originally designed as relaxing zones, or in storage rooms. The number of patients that exceeds the spatial capacities of particular ward generates a whole array of problems, including failure to provide adequate access to beds, intimacy, minimum of private space, separation of patients suffering from mania and psychosis from other patients, and provision of adequate quality of sleep.

Inadequate functional and spatial arrangement and the use of unsuitable elements of interior design, result in higher frequency of unwanted events in patient wards. An analysis of features of physical environment in hospitals helps identify places that are particularly dangerous for psychiatric patients. This concerns especially places that are hidden, dark, uncontrolled by the personnel, as well as elements of interior design and appliances that conduce to self – and allo-aggressive behavior. Both the function that fosters the emergence of dangerous zones, as well as the shape and elements of the interior determine the level of safety in the hospital and its wards. Arrangement of particular functions of space may hinder successful observation of patients, while elements of the interior may pose a threat to their safety, for instance, by triggering suicidal acts. Particular threats can be found in the number of the so-called hanging points (especially in old architecture), as well as impossibility to observe patients [4]. This might have an impact on the decision to attempt suicide due to the conditions that might make such an attempt successful.

Inappropriately constructed hospital space may impede contact with visitors. The lack of favorable conditions forces visitors to enter the ward and use rooms

that have not been adapted to that purpose. This also violates the intimacy of other patients.

Due to the structure of Polish legal system, rational modernization of psychiatric hospitals is problematic and often impossible. As far as modernized facilities are concerned, especially those under conservator's protection, pivotal in this respect are decisions made by local conservators of historic monuments. Modernization that follows conservator's instructions, which protects historic elements and is viable for technical and architectural reasons, may often be irrational and misguided from the point of view of the facility's function (i.e., psychiatric hospital). Conservator's decision may hinder or completely block any significant though required and fully justified changes.

Adaptation of existing hospital facilities to relevant regulations is a necessary precondition for ensuring their further existence, yet as such it does not provide patients and medical personnel with the standards of hospitalization and work that meet contemporary requirements.

Existing regulations of psychiatric therapeutics and their definition of the structure of built environment do not define all elements that are important for psychiatric hospitals. Legal acts that are in effect do not sufficiently define safety measures required for spaces of psychiatric hospitals. Regulations in question were defined in a very general fashion. For instance, they lack definition of possible implementation of preventive measures regarding suicide attempts, or other unwanted events.

In the light of the problems defined above, as far as modernized psychiatric hospitals are concerned, it seems often impossible to ensure, first, basic conditions – stemming from the present regulations of constituted law, and second, appropriate space for psychiatric hospitals.

What is necessary is a fundamental change in the approach to the infrastructure of psychiatric hospitals, both in design practice, as well as in the management and coordination of changes of legal regulations regarding the structure of built environment (architecture) of psychiatric hospitals. In the light of globally introduced solutions, as well as developments in psychiatry, existing regulations can be seen as decisively insufficient.

What is important is the promotion of rules of architecture design that ensure patients' safety, respect their dignity, provide conditions for intimacy and privacy, as well as offer favorable conditions for the personnel of psychiatric hospitals.

## References

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