Kharkiv National
Medical University

INTERNATIONAL SCIENTIFIC INTERDISCIPLINARY CONFERENCE

of Young Scientists and Medical Students

ISIC

25-27 May 2026

Kharkiv, Ukraine



Where knowledge heals and transforms

Kharkiv National
Medical University

INTERNATIONAL SCIENTIFIC INTERDISCIPLINARY CONFERENCE

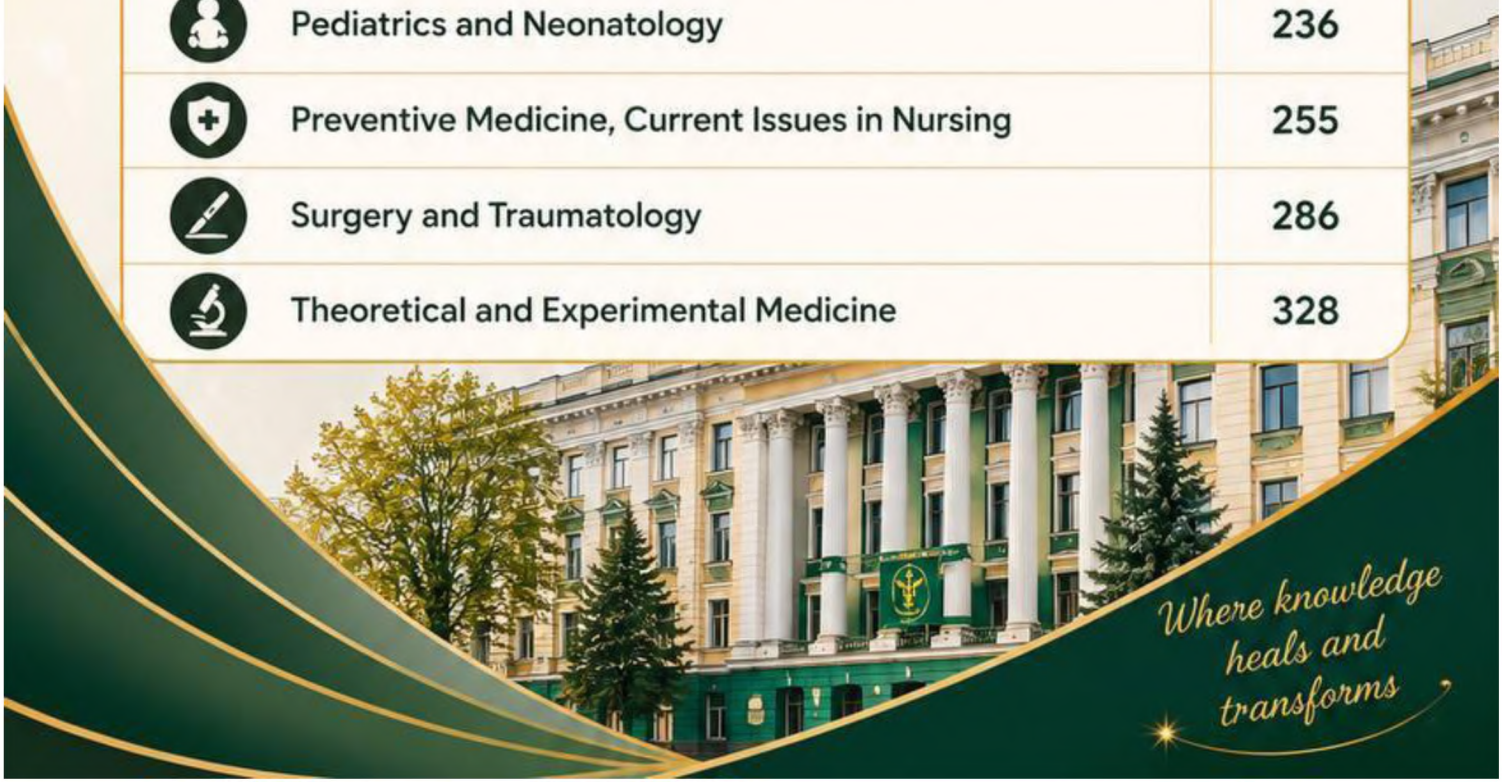
of Young Scientists and Medical Students

ISIC

25-27 May 2026

Kharkiv, Ukraine

SECTION	PAGE
Dentistry and Maxillofacial Surgery	4
Infectious Diseases, Epidemiology, Dermatology	33
Internal Medicine	64
Neurosciences	160
Obstetrics and Gynecology	187
Pediatrics and Neonatology	236
Preventive Medicine, Current Issues in Nursing	255
Surgery and Traumatology	286
Theoretical and Experimental Medicine	328



ISIC

INTERNATIONAL SCIENTIFIC
INTERDISCIPLINARY CONFERENCE

DENTISTRY AND MAXILLOFACIAL SURGERY

ADVANCING KNOWLEDGE.
INSPIRING INNOVATION. IMPROVING LIVES.

May 25–27, 2026



Where knowledge heals and transforms

Krasnozhon Oleksiy, German Stanislav

EVALUATION OF CLINICAL EFFECTIVENESS AND ACCURACY OF DIGITAL SMILE DESIGN IN ORTHOPEDIC DENTISTRY

Kharkiv, Ukraine

Kharkiv National Medical University Department of Orthopedic dentistry
Scientific advisor: prof. Igor Yanishen

Relevance. Traditional methods of aesthetic treatment planning, such as analog waxup without prior visualization, possess several limitations: the inability to fully demonstrate the expected outcome to the patient, communication difficulties between the dentist and the laboratory technician, and low predictability of the final restoration. The implementation of Digital Smile Design (DSD) technologies represents a modern alternative and standard care, minimizing the risk of errors and involving the patient in the creation of their future smile prior to tooth preparation.

Aim. To improve the effectiveness of prosthetic treatment in patients with aesthetic defects of the dentition by implementing the Digital Smile Design protocol, and to evaluate its clinical and technological accuracy along with its impact on patients psycho-emotional state.

Materials and Methods. A clinical and instrumental examination and prosthetic treatment planning were performed for 10 patients (aged 22 to 45 years) with defects of the dental hard tissues and dentitions in the anterior region. The comprehensive planning protocol included: dental photoprotocol, intraoral scanning, creation of a 2D /3D virtual smile design, and its clinical evaluation using temporary restorations(Mock-up). The accuracy of the project replication was assessed by superimposition of the final restorations STL files onto the initial 3D DSD project using specialized software. The level of psycho-emotional comfort and patient satisfaction with the treatment outcomes was determined using the Visual Analogue Scale (VAS).

Results. The application of DSD technology and Mock-up try-in allowed for complete mutual understanding between the clinician and the patient regarding the shape, size, and position of future teeth during the first visit in 90% of cases (n=9). Accuracy analysis via STL file superimposition demonstrated that the mean linear deviation of the final restorations from the virtual project was 0.04±0.01 mm, indicating high predictability of the method. The mean patient satisfaction score

for the aesthetic outcome on the VAS after final restoration cementation was 9.6 out of 10. Concurrently, 80% of patients (n=8) noted that the smile "test-drive" phase completely eliminated their fear of treatment and increased their trust to the clinician.

Conclusions. The integration of Digital Smile Design into the prosthetic treatment protocol ensures high accuracy (deviation up to 0.04 mm) in replicating the virtual project into the final clinical outcome. The use of a Mock-up significantly improves the patient's psychological comfort, eliminates the "unexpected result" effect, and increases satisfaction with the final aesthetic outcome, thereby enhancing the communication within the "dentist–patient–technician" team.