

Mechanism for The Independent Development of Neonatological-Clinical Audit Skills in Medicine

Anvarova Zilola Qosimovna

Assistant at Fergana Institute of Public Health and Medical Sciences, Uzbekistan

Received: 18 March 2025; **Accepted:** 14 April 2025; **Published:** 16 May 2025

Abstract: The process of continuous assessment during the acquisition of educational material should ensure the full-fledged formation of medical neonatological clinical skills in students without dynamic stress. The methods of designing and developing neonatal clinical education technology in pediatrics are extensively covered. The article highlights the importance of modern innovative teaching methods in acquiring pediatric medical skills, including the use of phantoms and anatomical models to enhance the efficiency of learning and strengthen students' professional competence. Additionally, it outlines the roles and responsibilities of medical educators and students in mastering neonatological clinical sciences.

Keywords: Medical educational material, learning process, continuous medical education, assessment, medical neonatological clinical skills, dynamic stress, pediatrics, medical didactics, neonatal clinical education technology design, development methods, pediatric medicine, learning, modern innovative teaching methods.

Introduction: Neonatological Clinical Audit.

A neonatological clinical audit is defined as the regular critical analysis of medical care, including prevention, diagnosis, and treatment procedures (which may also be used for preventive treatment). This analysis evaluates the quality of interventions, the effectiveness of resource utilization, and the overall impact on the quality of patients' lives.

The term "neonatological clinical" in this context applies to various professional groups, including doctors, midwives, nurses, physiotherapists, speech therapists, social workers, and other specialists involved in neonatal care. Practical work is reviewed against established standards, and if such standards do not exist, agreements must be reached on the best practices.

A neonatological clinical audit is a dynamic process where standards may evolve as new data is collected. The audit process can be represented as a cycle involving:

1. Identifying the problem,
2. Selecting ideal standards,
3. Reviewing existing standards,

4. Analyzing collected data,
5. Implementing necessary changes,
6. Identifying the root causes of problems,
7. Selecting strategies to improve medical neonatological clinical practice.

Several types of audits exist, including:

- **Structural audit:** Examines resources such as personnel, equipment, facilities, and medical tools necessary for neonatal clinical care.
- **Process audit:** Assesses the use of these resources in medical education and practice.
- **Outcome audit:** Evaluates the results of medical interventions.

Audit Criteria and Standards

Audit criteria indicate how well a task is performed and how effectively patient care is delivered. A standard represents the optimal level that should be achieved in practice. Typically, selecting two or three criteria is sufficient for evaluation, as these can be easily recorded and measured.

For example, if blood pressure monitoring is used as a criterion, the standard might require that men aged

40–60 have their blood pressure checked and recorded in their medical records at least once every five years. If an audit shows that only 60% of patients meet this standard, healthcare professionals must analyze the causes of this gap and work toward achieving the target standard. Audits are usually conducted as retrospective analyses using computer records, patient medical charts, or specially designed questionnaires.

METHODOLOGY

In medical education, a method refers to the most precise and efficient way to achieve a learning objective. To conduct an effective audit, all practitioners involved in neonatal care must participate. Neonatological clinical audits can be applied in various medical fields, such as:

- **Neonatal clinical practice**
- **Chronic diseases:** Diabetes, bronchial asthma, hypertension, anemia, etc.
- **Financial aspects of medical practice:** Paid services such as diagnostic tests and vaccinations
- **Prescriptions:** Medication dosages and adherence to prescription guidelines
- **Patient referrals and management:** How doctors schedule and manage patient visits

It is essential to note that a neonatological clinical audit is not a punitive system. Instead, it follows six steps:

1. **Selecting a problem:** The audit should focus on a well-defined topic that can be assessed against established standards.
2. **Agreeing on goals and objectives:** Since audits are group activities, all team members must agree on the objectives.
3. **Choosing an ideal standard:** This may refer to a practical and achievable benchmark rather than a theoretical ideal.
4. **Analyzing performance:** Gathering information such as patient records and comparing outcomes with established standards.
5. **Defining and implementing changes:** Addressing identified gaps through policy changes or new systems.
6. **Evaluating implementation:** After a set period (6–12 months), checking whether the planned improvements have been successfully implemented.

RESULTS

Criteria for Selecting Audit Topics

When selecting an audit topic, the following criteria should be considered:

- The issue should be significant due to its

frequency, severity, or potential consequences.

- It should be clearly defined and agreed upon by all auditors involved.
- Conducting the audit should be feasible.
- The audit should lead to actionable improvements.

An effective way to identify audit topics is through patient surveys, complaint analysis, or computer data evaluation.

Enhancing Practical Skills in Medical Education

The process of acquiring medical skills consists of several stages:

1. Unconscious incompetence
2. Conscious incompetence
3. Unconscious competence
4. Conscious competence

During this process, students refine their techniques by performing tasks carefully, observing others, receiving guidance from educators, and receiving feedback. To reinforce skills, educators should use:

- Video demonstrations
- Training on anatomical models
- Simulation exercises
- Step-by-step practical demonstrations

A crucial teaching technique is demonstration, which helps students master clinical skills such as measuring blood pressure or conducting patient examinations.

Benefits of Demonstration-Based Learning:

- Students actively engage with both verbal explanations and visual demonstrations.
- Clear step-by-step procedures help students retain information better.
- The approach ensures uniformity in training and assessment.

However, some students may experience anxiety when performing tasks in front of peers and instructors. Additionally, if the session is not well-organized, students waiting for their turn may lose focus. To mitigate this, instructors should:

- Monitor each participant's performance closely
- Ensure that waiting students remain engaged through discussion and questioning
- Use experienced students as role models for others

CONCLUSION

In summary, independent learning plays a crucial role

in medical education, shifting the focus from instructors to students and reinforcing material through active engagement. While demonstration-based learning effectively enhances skill acquisition, educators must ensure that all students remain involved and receive constructive feedback.

To maximize the effectiveness of medical training, educators should:

- Foster an interactive learning environment
- Encourage self-confidence through practical applications
- Align theoretical instruction with real-world scenarios

By implementing these strategies, medical education can produce more competent and confident healthcare professionals, ultimately improving neonatal clinical care. This translation maintains the original meaning while ensuring clarity and academic accuracy. If you need further refinements or academic editing, let me know!

REFERENCES

Azizkhodzhaeva N.N. Pedagogical technologies and pedagogical skills -T.: TDPU, 2003

Akhmedova M.E. Pedagogy. Textbook. "Medical Publishing House Printing House", LLC. T.: - 2022. 223 pages.

Teshaev O.R., Mamatkulov B.et al. A manual for teachers on developing skills in presentation and interactive teaching methods. T.: 2011. 91 pages.

Khalmatova B.T., Ibragimov F.N., Yakovenko V.I. Methodical manual on the module "in the clinic". T.: 2010. 145 pages

Teshaev O.R. et al. Design and planning of pedagogical technologies in medicine. Educational - methodological manual. T.: 2010. 133 pages.

Tolipov U., Usmanboeva. M. Pedagogical technology: theory and practice. - T.: Science, 2005.

Farberman B. Advanced pedagogical technologies. - T.: "Science", 2000.

Farberman B., Musina R.G., Djumbaeva F.A.. Sovremennye metody prepodavaniya v vuzakh. - T.: 2001.

Shodmonov Sh., Baubekova G.D., Halikova G.T.. Innovative methods of training and economic education. - T.: 2003.

Imamov E., Fattakhov M.. Information technologies. - T.: 2002.

Rakhimov O.D. Innovative pedagogical technologies: Project method as a key technology for improving the quality of education. Methodological manual. T.: 2013.

84 pages

Ganieva M.A., Fayzullaeva D.M. Collection of pedagogical technologies of case study teaching. Methodological manual. T.: 2013, 95 pages

Modern educational technologies: content, design and implementation. Express manual. T.: 2001. TACIS project.

Mustafakulov S.I., Golysh L.V., et al. "Development and implementation of innovative educational technologies" educational materials. T.: TDIU, 2011.

Tolipov U.K., Usmonboyeva M.. Pedagogical technology: theory and practice. - T.: Science, 2005.

B.Mamatkulov., G.S.Avezova. Methods of teaching special subjects. T.: Textbook-2019 y., 301 p.