

Most participants noted that the debriefing identified communication errors and determined ways to prevent them (97.4%, $M = 1.40$ points). This underscores the importance of a high-quality debriefing in simulation-based training aimed at developing communication skills and teamwork. 89.5% of respondents noted the possibility of applying the communication experience gained in clinical practice. 97.4% of respondents are willing to recommend simulation training to colleagues, which indicates a high level of satisfaction with the training aimed at developing communication and teamwork skills.

Discussion

The survey data indicate that medical specialists highly value simulation training aimed at improving communication skills, particularly in terms of debriefing and its practical focus. However, the low leadership score indicates a systemic problem related to the fact that medical specialists do not always identify a coordinator during the provision of emergency medical care. At the same time, high ratings for responsibility and mutual understanding suggest that there is potential for developing teamwork skills. The psychological safety of participants during training creates a conducive learning environment, and debriefing helps participants reflect on mistakes and strengthen teamwork. The findings can be used to modify continuing education programs for medical specialists, with an emphasis on practicing and improving communication and teamwork skills when providing emergency medical care to newborns.

Conclusions

This study demonstrates the need for simulation-based training to develop communication skills and teamwork among medical specialists when providing emergency medical care to newborns. This training method, as part of continuing medical education, is a promising tool for enhancing the safety of newborns and improving the quality of medical care.

Manuscript received on June 29, 2026

FEATURES OF COMMUNICATION WITH LEGAL GUARDIANS OF CHILDREN UNDER ONE YEAR OF AGE IN THE OUTPATIENT SETTING

Pushkar O. N., Lisovsky O. V., Lisitsa I. A., Valiakhmetova D. G., Uskova S. Yu.

St. Petersburg State Pediatric Medical University, St. Petersburg, Russian Federation

pushkar.olesya.1998@mail.ru

DOI: 10.46594/2687-0037_2026_3_2193

Abstract. Communication between healthcare professionals and parents of infants in their first year of life is one of the key factors. A family-oriented approach contributes to increased adherence to medical recommendations, the development of child-care skills, and the timely identification of risk factors for health problems. The analysis conducted identified the main areas of communication between healthcare professionals and families and assessed the significance of clinical and social factors influencing the effectiveness of family-oriented care for infants in their first year of life.

Scientific specialty: 3.2.3. Public Health and Health Care Organization, Sociology, and History of Medicine.

Relevance

A child's first year of life is the most critical stage for the development of health, physical, and psychomotor development. The effectiveness of medical care is largely determined not only by the timeliness of preventive health checkups but also by the quality of communication between healthcare professionals and the child's parents and legal guardians. Insufficient medical knowledge among families, low adherence to preventive measures, and the presence of adverse social factors can reduce the effectiveness of outpatient care. In this regard, improving a family-centered approach is considered one of the priority areas for the development of primary health care for children.

Objective

To examine the characteristics of communication with parents and legal guardians of infants during the first year of life in the outpatient setting, based on an analysis of clinical and social factors, the child's developmental characteristics, and modern principles of family-oriented care.

Materials and Methods

A retrospective analysis was conducted of official statistical data from the Federal State Statistics Service, the Ministry of Health of the Russian Federation, and the Pension and Social Insurance Fund of the Russian Federation for 2023–2024, characterizing the health status of children in their first year of life in the Russian Federation. An analysis was performed of the structure of newly registered morbidity, the prevalence of chronic conditions, as well as the clinical and social factors within the family that influence a child's health and the effectiveness of interaction between healthcare professionals and parents. In addition, an analysis was conducted of domestic and international literature sources devoted to family-oriented care for young children.

Results

It was found that among newly registered diseases in children during their first year of life, respiratory diseases are the most common, accounting for approximately 39% of all cases. Diseases of the nervous system rank second (15%), followed by diseases of the digestive system (10%) and infectious diseases (9%). An analysis of trends in the main disease categories for 2019–2024 showed that respiratory diseases continued to dominate the morbidity profile of infants in their first year of life, confirming the need to strengthen preventive care at the outpatient level. It was found that the effectiveness of family-oriented care is largely determined by the level of parents' engagement with healthcare, the timeliness of preventive checkups, adherence to the doctor's recommendations, and the family's participation in preventive measures. An analysis of clinical and social factors showed that the most significant circumstances affecting the effectiveness of outpatient care for a child are single-parent families (21%), low socioeconomic status (19%), insufficient adherence to preven-

tive checkups (17%), parents' harmful habits (15%), large families with limited social resources (12%), and parents' refusal of preventive measures and vaccinations (10%). The data indicate that educating parents on breastfeeding, child care, age-specific developmental characteristics, and vaccination, as well as maintaining regular communication with the local pediatrician, contribute to improving the effectiveness of preventive care and fostering strong family commitment to preventive measures.

Conclusions

The effectiveness of outpatient care for infants in their first year of life is determined by a combination of medical and social factors. A family-centered approach helps increase parents' adherence to medical recommendations, improve the quality of child care, and ensure that preventive measures are carried out in a timely manner. Taking family characteristics into account, active interaction between healthcare providers and parents, and individualized care help improve the effectiveness of preventive health monitoring and the quality of primary health care for infants in their first year of life.

Manuscript received on July 3, 2026

DEVELOPING TRAINING APPROACHES FOR PERIPHERAL NERVOUS SYSTEM SURGERY

Sangimurodov M. Kh.¹, Yarikov A. V.^{1,2,3}, Baitinger A. V.^{4,5,6}, Baitinger V. F.^{4,5,6}, Selyaninov K. V.^{4,5,6}, Tsybusov S. N.³, Perlmutter O. A.¹, Fraerman A. P.¹, Pashin D. L.⁶

¹ City Clinical Hospital No. 39, Nizhny Novgorod, Russian Federation

² Volga Regional Medical Center of the Federal Medical Biological Agency, Nizhny Novgorod, Russian Federation

³ Nizhny Novgorod State University named after N. I. Lobachevsky, Nizhny Novgorod, Russian Federation

⁴ Research Institute of Microsurgery, Tomsk, Russian Federation

⁵ V. F. Voyno-Yasenetsky Krasnoyarsk State Medical University, Krasnoyarsk, Russian Federation

⁶ Federal Siberian Scientific and Clinical Center of the Federal Medical Biological Agency, Krasnoyarsk, Russian Federation

sangimurodovmuhammadjon@gmail.com

DOI: 10.46594/2687-0037_2026_3_2187

Abstract. Advances in peripheral nervous system surgery are accompanied by the introduction of new technologies, changes in approaches to reconstructive procedures, and improvements in rehabilitation methods. An analysis of current scientific data has made it possible to identify key areas of development in this field and to justify the need for their integration into educational programs for neurosurgeons and related specialists.

Scientific specialty: 3.2.3. Public Health and Health Care Organization, Sociology and History of Medicine

Relevance

Lesions of the peripheral nervous system (PNS) account for 5–10% of the total morbidity in the population, posing a significant challenge for modern healthcare. Over

time, PNS surgery has undergone fundamental changes. An analysis of the scientific literature on advances in PNS surgery demonstrates an interdisciplinary synthesis involving neurosurgery, trauma and orthopedics, neurology, plastic surgery, microsurgery, neuroimaging, regenerative biology, and rehabilitation. The long-standing problem of incomplete recovery motivates researchers to seek solutions at every stage. Consequently, all innovations in PNS surgery must be incorporated into training programs at all levels.

Objective

To improve the effectiveness of treatment for PNS injuries and diseases by incorporating innovative developments into training programs.

Materials and Methods

A review of the scientific literature on the theory of PNS surgery development, published in the Scopus, Web of Science, MedLine, Cochrane Library, PubMed, Google Scholar, and ResearchGate databases, CyberLeninka, RINC, the electronic library of the Central Scientific Medical Library (CSML), Siberian State Medical University (SSMU), Krasnoyarsk State Medical University (KSMU), and Far Eastern State Medical University (FESMU) for the years 2000–2026; a content analysis was conducted using methods of analysis and synthesis.

Results

An analysis of the literature reveals the following trends in the development of PNS surgery.

1. The evolution of microsurgical techniques and new materials. Fascicular suturing. Fibrin glue and sutureless techniques. Surgical instruments (introduction of ultra-fine 10–0 and 11–0 sutures, reduction of foreign body reactions). Supermicrosurgery.
2. Biological and synthetic conduits, allografts.
3. Neurotization and “supercharge.” Shifting the focus from nerve trunk reconstruction to functional redistribution.
4. Intraoperative imaging and neurophysiological monitoring. High-resolution ultrasound (HRUS) and MR neurography. Confocal laser endomicroscopy.
5. Adjuvant therapy and regenerative medicine. Surgery creates only the anatomical foundation; managing regeneration is the key factor. Growth factors and biological scaffolds (local delivery of neurotrophic factors — NGF (nerve growth factor), BDNF, GDNF, TN-3, VEGF — via hydrogels or controlled-release systems). Cell therapies (transplantation of autologous Schwann cells and bone marrow-derived mesenchymal stem cells). Electrical stimulation. Pharmacological support (cAMP analogs, phosphodiesterase-4 inhibitors)
6. Orthopedic surgeries. Tendon-to-muscle transfers. Tenodesis. Arthrodesis.
7. Interventional procedures. Nerve hydrodissection. Radiofrequency neuroablation. Peripheral neurostimulation.
8. Postoperative rehabilitation and cortical reorganization. Electrical stimulation. Photobiomodulation.