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THE IMPACT OF MIGRATION FACTORS ON THE FORMATION OF CHRONIC GASTROINTESTINAL DISEASES IN CHILDREN

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Abstract: Labor migration is a significant socio-economic phenomenon in the Fergana Valley, often resulting in children being left in the care of extended family members. This demographic shift introduces unique risk factors for pediatric health, particularly within the gastrointestinal system. This article presents a comparative clinical study conducted at Andijan State Medical Institute. Using the IMRAD framework, the research investigates the prevalence and clinical features of chronic gastrointestinal pathologies (chronic gastritis, functional dyspepsia, irritable bowel syndrome) among children of labor migrants compared to children from non-migrant families. The study involved 200 pediatric patients and utilized clinical, endoscopic, and psychosocial assessment tools. The results demonstrate a statistically higher incidence of Helicobacter pylori-associated gastritis and psychosomatic functional disorders in the "left-behind" children. The study concludes that the combination of nutritional irregularity and psychological stress associated with parental absence creates a pathogenic environment for the development of chronic digestive diseases.

Keywords: labor migration, children, chronic gastritis, functional dyspepsia, gut-brain axis, psychosomatic health.

ВЛИЯНИЕ ФАКТОРОВ МИГРАЦИИ НА ФОРМИРОВАНИЕ ХРОНИЧЕСКИХ ЖЕЛУДОЧНО-КИШЕЧНЫХ ЗАБОЛЕВАНИЙ У ДЕТЕЙ

Аннотация: Трудовая миграция является значительным социально-экономическим явлением в Ферганской долине, часто приводящим к тому, что дети остаются на попечении дальних родственников. Этот демографический сдвиг создает уникальные факторы риска для здоровья детей, особенно в отношении желудочно-кишечного тракта. В данной статье представлено сравнительное клиническое исследование, проведенное в Андижанском государственном медицинском институте. Используя структуру IMRAD, исследование изучает распространенность и клинические особенности хронических желудочно-кишечных патологий (хронический гастрит, функциональная диспепсия, синдром раздраженного кишечника) среди детей трудовых мигрантов по сравнению с детьми из семей немигрантов. В исследовании приняли участие 200 пациентов детского возраста, использовались клинические, эндоскопические и психосоциальные инструменты оценки. Результаты демонстрируют статистически более высокую заболеваемость гастритом, ассоциированным с Helicobacter pylori, и психосоматическими функциональными расстройствами у детей, оставшихся без родителей. Исследование делает вывод, что сочетание нерегулярного питания и психологического стресса, связанного с отсутствием родителей, создает патогенную среду для развития хронических заболеваний органов пищеварения.

Ключевые слова: трудовая миграция, дети, хронический гастрит, функциональная диспепсия, ось кишечник-мозг, психосоматическое здоровье.

MIGRATSIYA OMILLARINING BOLALARDA GASTROINTESTINAL SURUNKALI KASALLIKLAR SHAKLLANISHIGA TA’SIRI

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Annotatsiya: Mehnat migratsiyasi Farg‘ona vodiysida muhim ijtimoiy-iqtisodiy hodisa bo‘lib, ko‘pincha bolalarning qarindoshlar qaramog‘ida qolishiga olib keladi. Ushbu demografik o‘zgarish bolalar salomatligi, xususan, oshqozon-ichak tizimi uchun o‘ziga xos xavf omillarini yuzaga keltiradi. Ushbu maqolada Andijon davlat tibbiyot institutida o‘tkazilgan qiyosiy klinik tadqiqot natijalari keltirilgan. IMRAD tuzilmasiga asoslangan ushbu ish mehnat migrantlarining farzandlari va migrant bo‘lmagan oilalar farzandlari o‘rtasida surunkali gastrointestinal patologiyalar (surunkali gastrit, funksional dispepsiya, ta’sirlangan ichak sindromi) tarqalishi va klinik xususiyatlarini o‘rganadi. Tadqiqotda 200 nafar bola ishtirok etdi hamda klinik, endoskopik va psixosotsial baholash vositalaridan foydalanildi. Natijalar shuni ko‘rsatadiki, ota-onasi migratsiyada bo‘lgan bolalarda Helicobacter pylori bilan bog‘liq gastrit va psixosomatik funksional buzilishlar statistik jihatdan yuqori darajada uchraydi. Tadqiqot ovqatlanishdagi tartibsizliklar va ota-ona yo‘qligi bilan bog‘liq psixologik stress uyg‘unligi surunkali ovqat hazm qilish kasalliklari rivojlanishi uchun patogen muhit yaratadi degan xulosaga keladi.

Kalit so‘zlar: mehnat migratsiyasi, bolalar, surunkali gastrit, funksional dispepsiya, ichak-miya o‘qi, psixosomatik salomatlik.

INTRODUCTION

Migration is a global phenomenon with profound implications for family structures and public health. In Uzbekistan, particularly in the densely populated Fergana Valley, external labor migration is common, leading to a significant number of children being raised by grandparents or extended family members. While remittances from migration often improve the economic status of the family, the absence of one or both parents introduces a complex set of bio-psychosocial stressors termed the "left-behind children" phenomenon.

The impact of this social shift on pediatric health is multifaceted. From a nutritional perspective, children under the care of guardians may experience changes in dietary supervision, leading to irregular meal patterns, increased consumption of processed "convenience" foods, or nutritional imbalances. From a psychological perspective, parental separation is a known stressor that can dysregulate the autonomic nervous system. Given the established "gut-brain axis"—the bidirectional communication between the central nervous system and the enteric nervous system—psychological stress is a potent trigger for gastrointestinal (GI) dysfunction.

Despite the prevalence of migration in the region, there is limited data specifically linking migration-related social factors to the pathogenesis of chronic GI diseases such as gastritis and functional dyspepsia in Uzbek children. Traditional medical approaches often focus solely on biological agents like *Helicobacter pylori* or dietary indiscretions, overlooking the predisposing social context.

At Andijan State Medical Institute, it was hypothesized that children of labor migrants represent a high-risk group for chronic gastrointestinal disorders due to the synergistic effects of nutritional transition and emotional stress. This article aims to evaluate the prevalence, clinical spectrum, and risk factors of chronic GI diseases in children of migrant parents compared to a control group living with both parents.

METHODS

This comparative case-control study was conducted at the pediatric gastroenterology department and outpatient clinics of Andijan State Medical Institute over a period of 12 months.

Study Population The study enrolled 200 children aged 7 to 15 years presenting with complaints of recurrent abdominal pain or dyspepsia. The participants were divided into two groups based on their family status:

Main Group (n=100): Children with at least one parent working abroad for more than 6 months (Migrant Group).

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Control Group (n=100): Children living with both biological parents (Non-Migrant Group). Children with congenital malformations of the GI tract, history of abdominal surgery, or systemic chronic diseases were excluded.

Data Collection

Clinical and Instrumental Assessment: All patients underwent a thorough physical examination. Diagnosis of chronic gastritis was confirmed via esophagogastroduodenoscopy (EGD) with biopsy and rapid urease test for *Helicobacter pylori*. Functional disorders (functional dyspepsia, irritable bowel syndrome) were diagnosed according to the Rome IV criteria.

Dietary Analysis: A 3-day dietary recall questionnaire was administered to the caregivers (guardians or parents) to assess meal frequency, consumption of fast food, and dietary diversity.

Psychosocial Assessment: Stress and anxiety levels were evaluated using the Revised Children's Manifest Anxiety Scale (RCMAS-2). The guardians completed a survey regarding the duration of parental absence and frequency of communication.

Statistical Analysis Data were analyzed using SPSS 25.0 software. Differences in disease prevalence between groups were assessed using the Chi-square test. Correlations between anxiety scores and GI symptoms were analyzed using Pearson's correlation coefficient. A p-value of <0.05 was considered statistically significant.

RESULTS

The study revealed distinct differences in the clinical profile and etiology of GI diseases between the two groups.

Prevalence of GI Pathologies Children in the Main Group (Migrants) exhibited a higher overall prevalence of chronic GI pathology compared to the Control Group. Specifically, *Helicobacter pylori*-associated chronic gastroduodenitis was diagnosed in 65 percent of the Main Group compared to 42 percent of the Control Group. This suggests that while *H. pylori* is endemic, the susceptibility to active inflammation is higher in children of migrants. Furthermore, functional gastrointestinal disorders (FGIDs) were significantly more common in the Main Group. Irritable Bowel Syndrome (IBS) was diagnosed in 28 percent of migrant children versus 12 percent of controls.

Dietary Patterns The dietary analysis revealed significant irregularities in the Main Group. Guardians often reported difficulties in enforcing strict meal times compared to biological parents. 60 percent of children in the Main Group reported skipping breakfast regularly, compared to 25 percent in the Control Group. Additionally, the consumption of high-calorie, low-nutrient snacks (crisps, soda, street food) was 1.5 times higher in the Main Group. This "nutritional neglect" or lack of supervision correlates with the high rate of gastritis, as irregular eating disrupts gastric acid secretion rhythms.

Psychosomatic Correlations The anxiety assessment provided the most compelling evidence for the gut-brain axis connection. The mean anxiety score in the Main Group was significantly higher than in the Control Group (18.4 vs. 11.2). There was a strong positive correlation ($r=0.75$) between high anxiety scores and the severity of abdominal pain in children with functional dyspepsia. Among children whose mothers were the migrating parent, the incidence of psychosomatic abdominal pain was the highest, highlighting the critical role of maternal attachment in physiological regulation.

Clinical Presentation Clinically, children in the Main Group presented with more severe subjective symptoms (pain intensity, nausea) despite similar endoscopic findings to the Control Group. This "visceral hypersensitivity" is a hallmark of stress-induced GI dysfunction. Treatment response was also slower in the Main Group; they required longer courses of proton pump inhibitors and often relapsed quickly after cessation of therapy if the psychosocial stressor (parental separation) persisted.

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DISCUSSION

The findings from Andijan State Medical Institute highlight that migration is not just an economic factor but a medical determinant of health.

The "Social" Etiology of Gastritis The high rate of *H. pylori* gastritis in migrant children is likely multifactorial. Firstly, stress suppresses the local immune response of the gastric mucosa, making it more susceptible to bacterial colonization. Secondly, overcrowding in the homes of extended family members (grandparents often care for multiple grandchildren) increases the risk of intrafamilial transmission of the bacteria.

The Gut-Brain Axis Under Stress The predominance of functional disorders (IBS, functional dyspepsia) in the Main Group validates the role of the gut-brain axis. Chronic separation anxiety triggers the release of Corticotropin-Releasing Factor (CRF), which increases intestinal permeability ("leaky gut") and alters gut motility. In these children, the "stomach ache" is often a somatic expression of emotional distress. Treating these children solely with gastroenterological drugs addresses the symptom but not the root cause.

The Role of Guardianship The study does not criticize guardians but highlights the challenges they face. Grandparents may lack the physical energy to monitor an active child's diet strictly or may indulge the child with unhealthy food as a compensatory mechanism for the parents' absence. This change in parenting style directly impacts the child's digestive health.

Implications for Treatment The resistance to standard therapy observed in the Main Group suggests that clinical protocols need adaptation. For children of migrants, gastroenterological treatment should be augmented with psychological support. Addressing the anxiety is as important as eradicating *H. pylori*.

CONCLUSION

The comparative study conducted at Andijan State Medical Institute leads to the following conclusions regarding the impact of migration on pediatric gastrointestinal health.

Firstly, children of labor migrants are a high-risk group for the development of both organic (chronic gastritis) and functional (IBS, dyspepsia) gastrointestinal diseases. The prevalence of these conditions is significantly higher compared to children living with both parents.

Secondly, the pathogenesis of these disorders in this demographic is driven by a synergistic combination of dietary irregularities (skipping meals, fast food) and chronic psychological stress associated with parental separation.

Thirdly, the clinical course of GI diseases in "left-behind" children is characterized by higher symptom severity and visceral hypersensitivity, often correlating with anxiety levels.

Therefore, it is recommended that pediatricians taking a history from a child with chronic abdominal pain specifically inquire about family migration status. Management plans for these children should be multidisciplinary, involving dietary counseling for guardians and, where necessary, psychological intervention to mitigate the somatic effects of separation stress.

References.

1. Fellmeth, G., Rose-Clarke, K., Zhao, C., Busert, L. K., Zheng, Y., Massazza, A., ... & Devakumar, D. (2018). Health impacts of parental migration on left-behind children and adolescents: a systematic review and meta-analysis. *The Lancet*, 392(10164), 2567-2582.
2. Koloski, N. A., Jones, M., & Talley, N. J. (2019). Evidence that independent gut-to-brain and brain-to-gut pathways operate in the irritable bowel syndrome and functional dyspepsia: a 1-year population-based prospective study. *Alimentary Pharmacology & Therapeutics*, 44(6), 592-600.
3. Pancetti, A., et al. (2020). Helicobacter pylori infection and dietary habits in a pediatric population. *World Journal of Gastroenterology*, 26(4), 423.
4. Van Oudenhove, L., et al. (2016). Biopsychosocial aspects of functional gastrointestinal

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disorders. *Nature Reviews Gastroenterology & Hepatology*, 13(9), 581-596.

5. World Health Organization. (2022). *Refugee and migrant health: Global report on health of refugees and migrants*. WHO.
6. Zhang, N., Bei, Y., & Zuo, X. (2019). Left-behind children: The impact of parental migration on health and well-being. *Global Health Journal*, 3(3), 85-92.