

a medicilor rigorilor europene și tendințelor educaționale moderne, care să asigure condiții pentru încadrarea cât mai timpurie în câmpul muncii, combinând astfel munca cu formarea profesională (adoptarea cadrului normativ care să permită activitatea de muncă legală în funcție de asistent medical după anul III de studii, identificarea posibilităților de angajare în diverse funcții ale studenților în ultimii ani de studii, eliberarea diplomei de licență la finalizarea studiilor universitare și identificarea funcțiilor, în care ar putea activa persoanele licențiate în medicină, care nu au posibilitatea de a continua studiile postuniversitare, implementarea unor noi principii de admitere la studii postuniversitare de rezidențiat, bazate pe competitivitate și concurență, implicarea pe larg a medicilor rezidenți în procesul curativ-diagnostic etc.);

- diversificarea categoriilor de specialiști implicați în acordarea asistenței medicale populației, în special în domeniile și zonele defavorizate (asistenți medicali și moașe cu studii superioare, medic asistent, paramedic etc.);
- identificarea unor noi factori motivaționali pentru angajarea tinerilor specialiști, crearea condițiilor favorabile pentru adaptare și integrare în colectivele de muncă;
- oferirea unor facilități în primii ani de activitate profesională, care să contribuie realmente la soluționarea problemelor de ordin social;
- promovarea politicilor, care să asigure condiții de creștere profesională și avansare în carieră, exclusiv în baza de cunoștințe, abilități și capacități;
- promovarea principiilor de transparență decizională întru asigurarea condițiilor echitabile oricărui medic

în aspirațiile sale profesionale, dat fiind specificul și amploarea inechităților existente în societate și impactul extrem de grav al acestui fenomen asupra stării de spirit al tinerilor la început de cale profesională.

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Clinical-statistical aspects of the hereditary as a risk factor for constipation development in pregnant women

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Constipation, as the world goes, is the evacuation of the bowels less than three times per week. An objective criterion of constipation is considered to be stool weight decreased till 35 g per day. The clinico-genealogical method was used. The sampling size is 346 pregnant women who filled in the forms and were clinically examined 72.8 ± 2.4% of women live in the city area and 27.2 ± 4.6% of pregnant women live in the countryside. With the use of the clinico-genealogical investigation method, 364 pregnant women were examined: 164 pregnant women with a constipation problem (66 – with functional constipation, 98 – with gestational constipation) and 182 pregnant women without a constipation problem. In 53.66 ± 3.89% cases pregnant women with a constipation problem noted familial load by this feature while this feature's frequency occurred in the families of women without this problem 33.52 ± 3.5% (p < 0.01). The results of the investigation showed that pregnant women who have first relation degree relatives with a constipation problem in anamnesis have a higher constipation development risk in comparison with pregnant women with a favorable inherited anamnesis.

Key words: constipation, familial load, pregnancy.

Клинико-статистические аспекты наследственности, как фактора риска развития запоров у беременных

Запорами принято называть эвакуацию кала менее трех раз в неделю. Объективным критерием запоров является объем каловых масс менее 35 гр. в день. В исследовании был использован клинико-генеалогический метод. Нами было анкетировано и проведено клиническое обследование 346 беременных, из которых в городской местности проживает $72,8 \pm 2,4\%$ и в сельской – $27,2 \pm 4,6\%$. Методом клинико-генеалогического исследования обследовано 346 беременных: 164 беременные, страдающими запорами (66 – функциональными, 98 – гестационными) и 182 – без запоров. Результаты исследования свидетельствуют о важной роли наследственного фактора в этиопатогенезе запоров у беременных, что дает основание отнести его к факторам риска развития запоров в процессе гестации. В $53,66 \pm 3,89\%$ случаях у беременных женщин с запорами было отмечено наличие наследственного фактора, в то время как частота встречаемости у женщин без такой патологии составляет $33,52 \pm 3,5\%$ ($p < 0,01$). Результаты исследования продемонстрировали, что у беременных женщин с запорами, встречающимися в анамнезе у родственников первой линии родства, существует повышенный риск развития запоров в отличие от беременных без отягощенного семейного анамнеза.

Ключевые слова: запоры, наследственный фактор, беременность.

Introduction

Constipation, as the world goes, is the evacuation of the bowels less than three times per week. An objective criterion of constipation is considered to be stool weight decreased till 35 g per day. The clinical presentation can be supplemented by a labored defecation, a feeling of not full evacuation of the bowels and a discomfort in the belly [2].

The reasons for chronic constipation (Lane's disease) [5] depend on many factors (over 20) and in spite of a great number of materials published in different medical editions every year, it can only be agreed with the opinion of Heaton et. al. [6], that told that "Constipation is probably one of the less understandable and less explored organism functions".

Among different factors determining constipation development, they call a possible role of genetic susceptibility [11] and the influence of familial factors [12] in separate reports. However, the establishment of inherited susceptibility role in constipation development remains insufficiently clear and difficult to define. The investigations established that patients suffering from constipation with positive family anamnesis have different clinical manifestations that can help this constipation etiology definition [1].

Among the predominant reasons pregnant female constipation can be marked out as a separate group, according to the information from different statistical investigations this is the most frequent bowel pathology pregnant women have [4, 8, 10] and at the same time it has not received enough investigation of the problem [7]. A modern literature review of this problem [13] allows for making a conclusion that constipation is a multi-factorial pathology. However, it is difficult to choose the only reason that brings about constipation during a pregnancy period. As a rule, the whole set of different factors works. Side by side with already established reasons the possibility of inherited constipation susceptibility during women's gestational period is not excluded. Furthermore, in the available literature there was not found any publication about the role of heredity factors in constipation development during the pregnancy period.

The aim of the investigation. To study possible heredity roles as a risk factor in constipation development during gestation.

Material and methods

The clinico-genealogical method was used. The main point of the method consists in genealogical manifestation of clinical symptoms tracing with the indication of relative connections among the family members type. This method is used for an illness heredity type or a separate symptom establishment. The sampling size is 346 pregnant women who filled in the forms and were clinically examined $72.8 \pm 2.4\%$ of women live in the city area and $27.2 \pm 4.6\%$ of pregnant women live in the country side. An average age of the women participating in the investigation is 26 ± 0.3 years. As a result of the clinical examination, the pregnant women were divided into 2 groups: number I – the basic group including 164 ($47.4 \pm 3.9\%$) – pregnant women with a constipation problem and number II – the control group 182 (52.6 ± 3.7) – pregnant women without a constipation problem. In the basic group of the investigation "with a constipation problem" were included 66 women (40.24%) – with functional constipation (constipation appeared in different peri-

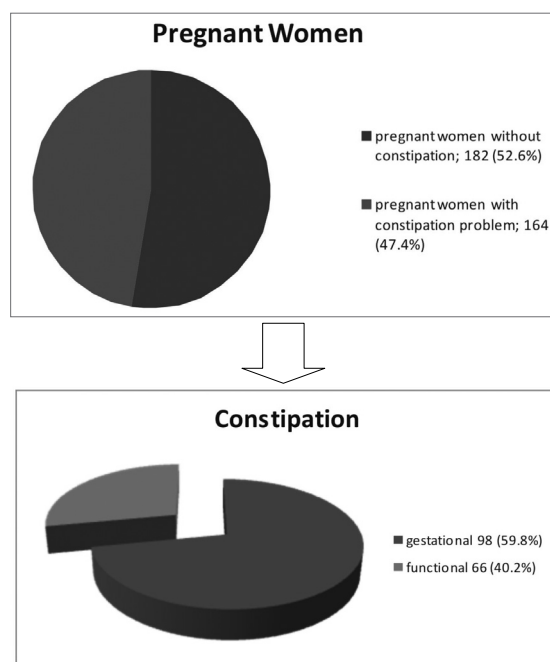


Fig. 1. The structure of the examined pregnant women "with a constipation problem" and "without a constipation problem" (%).

ods of time before the current pregnancy with the heaviness redoubling on the pregnancy background), and 98 women (59.76%) – with gestational constipation (constipation first appeared after pregnancy beginning; the women did not have this pathology before the pregnancy) fig. 1.

The diagnosis of constipation was made with due regard for Rome criterions III [2, 3]. For the differences in reliability detection between the frequencies of factor occurrence in contentional groups, Student's t-criterion was used.

With the goal of genealogic connection detection the canonical correlation coefficient between 2 sets of variables was calculated. As a basis of this coefficient calculation (r) the number of discriminant functions (λ) is used.

Results of the investigation

149 (43.1 ± 2.7%) of 346 participated in the investigated pregnant women noted constipation problem availability of the first relation degree relatives. The analysis of the first relation degree relatives' frequency occurrence of this pathology revealed the next characteristics fig. 2.

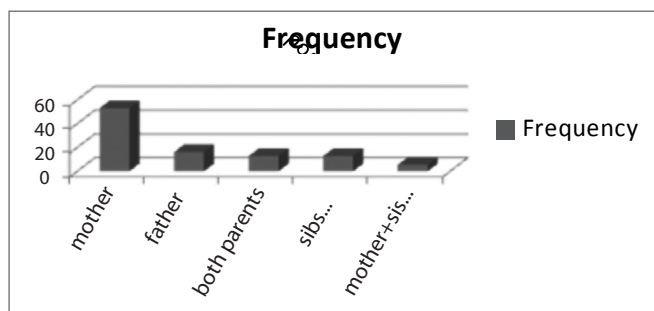


Fig. 2. Constipation frequency occurrence of pregnant women's first relation degree relatives (%).

Mother's constipation problem was observed in 79 (53.0 ± Mother's constipation problem was observed in 79 (53.0 ±

4.09%) cases, father's constipation problem was observed in 24 (16.1 ± 3.01%) cases. The situation when both parents had a constipation problem was observed in 19 (12.75 ± 2.73%) cases. In 19 (12.75 ± 2.73%) cases parents did not have a constipation problem but a brother or a sister of the pregnant woman had this pathology. Mother's and sister's availability of this feature occurred in 8 (5.4 ± 1.85%) cases and there were no cases of the association between father – siblings.

The analysis of the provided information indicates that among the first relation degree relatives of the pregnant women mothers have the most frequent constipation problem. However, a higher risk of the disease among the members of the family does not always indicate that it is specified by a genetic factor. Familial accumulation (aggregation) can be specified not by genetics but by environmental factors ("a common house"): the diet characteristics and the diet features, physical factors, cacoethes, etc. In the family, it is simpler to estimate a possible influence of general environmental factors on the disease development.

To this effect, they make a comparison of the disease frequency among relatives by blood men and women who live in the same conditions or were under the influence of the same factors [9].

Having made the analysis of the constipation frequency among the first relation degree relatives of pregnant women with the constipation problem and without, significant differences were made (tab. 1).

In 53.66 ± 3.89% cases pregnant women with a constipation problem noted familial load by this feature while this feature's frequency of occurrence in the families of the women without this problem is 33.52 ± 3.5% ($p < 0.01$). At the same time, the parents of the women with a constipation problem also had it in 4 times more cases than the parents of the women without a constipation problem ($p < 0.01$).

For the pregnant women without a constipation problem having the first relative degree relatives with constipation anamnesis the next correlation was made:

Table 1

The hereditary load level of pregnant women with a constipation problem and without it

Relation degree	Pregnant women without a constipation problem n = 182		Pregnant women with a constipation problem n = 164		P
	the number of cases		the number of cases		
	abs	$P_1 \pm ES_1\%$	abs	$P_2 \pm ES_2\%$	
Mother	34	18.68 ± 2.99	45	27.44 ± 3.18	> 0.05
Father	13	7.14 ± 1.81	11	6.71 ± 1.95	> 0.05
Both parents	4	2.19 ± 1.08	15	9.15 ± 2.25	< 0.01
Brother/Sister (sibs)	7	2.85 ± 1.43	12	7.32 ± 2.03	> 0.05
Mother/sister	3	1.65 ± 0.94	5	3.05 ± 1.34	> 0.05
All	61	33.52 ± 3.5	88	53.66 ± 3.89	< 0.01

- I place – mother – $r = 0.598$;
- II place – father – $r = 0.419$;
- III place –brother/sister – $r = 0.321$;
- IV place – both parents – $r = 0.248$;
- V place – mother/sister – $r = 0.217$.

Among the pregnant women with a constipation problem the next distinctive picture was made:

- I place – mother – $r = 0.582$;
- II place – both parents – $r = 0.382$;
- III place – brother/sister – $r = 0.346$;

- IV place – father – $r = 0.33$;
- V place – mother/sister – $r = 0.232$.

This information allows for the suggestion that hereditary factors play an important role in pregnant women with a constipation problem development.

It is difficult to estimate the contribution of hereditary factors at the present point in time as multifactorial diseases develop as the result of general effect of many solitary genes [9]. However, comparing two subgroups of pregnant women with a functional constipation problem and with a gestatio-

Table 2

The hereditary load level of pregnant women with a functional constipation problem and with a gestational constipation problem

Relative degree	Constipation types				P
	Functional n = 66		Gestational n = 98		
	The number of cases		The number of cases		
	abs	$P_1 \pm ES_1, \%$	abs	$P_2 \pm ES_2, \%$	
Mother	25	37.88 ± 5.97	20	20.41 ± 4.07	< 0.05
Father	2	3.03 ± 2.1	9	9.18 ± 2.91	> 0.05
Both parents	8	12.12 ± 4.01	7	7.14 ± 2.6	> 0.05
Brother/Sister (sibs)	8	12.12 ± 4.01	4	4.08 ± 1.99	> 0.05
Mother/Sister	2	3.03 ± 2.1	3	3.06 ± 1.74	> 0.05
All	45	68.18 ± 5.7	43	43.88 ± 5.01	< 0.01

nal constipation problem to each other, the predominance of constitutional-ereditorial factors in the group of pregnant women with functional constipation was statistically reliable determined (tab. 2).

Thereby it was determined that among the pregnant women with a functional constipation problem first relation degree relatives, the defecator disability problem was observed in $68.18 \pm 5.7\%$ cases while the pregnant women with gestational constipation noted a complicated heredity in $43.88 \pm 5.01\%$ cases ($p < 0.01$). This difference can be explained in terms of query etiopathogenesis in the next way: gestational constipation is conditioned by physiological shifts in the digestion system and its regulation during the gestational period [10].

It is necessary to note the statistically reliable predominance of constipation frequency observed on the pregnant women's with functional constipation mother side ($37.88 \pm 5.97\%$) in comparison with pregnant women with a gestational constipation problem ($20.41 \pm 7.07\%$) ($p < 0.05$).

It was determined that pregnant women with a functional constipation problem have an analogical risk factors hierarchy among the first relation degree relatives with the investigation group "pregnant women without a constipation problem", and pregnant women with a gestational constipation problem – with a group "pregnant women with a constipation problem" (tab. 3).

The results of the investigation confirm an important role

of the inherited factors in pregnant women's constipation etiopathogenesis. Pregnant women with a functional constipation problem have a bigger part of their contribution in comparison with pregnant women with a gestational constipation problem.

Table 3

The pregnant women constipation development risk factors hierarchy among the first relation degree relatives

Relation degree	Functional constipation		Gestational constipation	
	Rank	r	Rank	r
Mother	I	0.598	I	0.563
Father	IV-V	0.206	II	0.416
Both parents	II-III	0.389	III	0.374
Brother/Sister (sibs)	II-III	0.389	IV	0.292
Mother/Sister	IV-V	0.206	V	0.255

The results of the investigation confirm an important role of the inherited factors in pregnant women's constipation etiopathogenesis. Pregnant women with a functional constipation problem have a bigger part of their contribution in comparison with pregnant women with a gestational constipation problem.

Conclusions

1. The results of the investigation showed that pregnant women who have the first relation degree relatives with a constipation problem in anamnesis have a higher constipation development risk in comparison with pregnant women with a favorable inherited anamnesis.

2. The investigation determined that inherited component maternally predominates in the group of pregnant women with a functional constipation problem in comparison with the group with a gestational constipation problem.

3. The pregnant women constipation development risk factors hierarchy among the first relation degree relatives looks like: mother ($r = 0.563$), father ($r = 0.416$), both parents ($r = 0.374$), brother/sister ($r = 0.292$), mother/sister ($r = 0.255$).

4. The results of the investigation indicate an important role of the heredity factor in pregnant women's etiopathogenesis that gives reasons to refer it to the constipation development risk factors during the gestation process.

5. With the use of the clinical-genealogical investigation method 364 pregnant women were examined 164 pregnant women with a constipation problem (66 – with functional constipation, 98 – with gestational constipation) and 182 pregnant women without a constipation problem.

6. The results of the investigation testify to an important role of the heredity factors in pregnant women's constipation etiopathogenesis that gives grounds for bringing it to risk factors of constipation development during the gestation process.

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Studiul calităților psihometrice ale chestionarelor Minnesota LHF Q, MacNew Heart Disease HRQL și MOS-SF-36 la pacienții cu insuficiență cardiacă cronică de origine ischemică

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The study of psychometric qualities of Minnesota LHF Q, Mac New Heart Disease HRQL and MOS-SF-36 questionnaires in patients with ischemic chronic heart failure

Until now there have not been validated instruments that assess the quality of life in patients with cardiovascular disease in the Republic of Moldova. The 6 stages of Minnesota LHF Q, MacNew Heart Disease HRQL and MOS SF-36 questionnaires were validated, followed by a pilot study – 337 patients with ischemic chronic heart failure in II-III NYHA functional classes. To determine the psychometric qualities of the questionnaires we performed a test-retest method looking at correlations between the components of the questionnaires and quality of life indices, which were analyzed according to the age, sex, living environment, and studies. Our results demonstrated the questionnaires' reliability and validity through the indication of linguistic validation that had been carried out successfully. Thus, it can be a methodological basis for future clinical trials in the Republic of Moldova.

Key words: quality of life, ischemic chronic heart failure, Minnesota LHF Q, MacNew Heart Disease HRQL, MOS SF-36.