



Correlations of medical and demographic indicators with unmodified factors of stroke, tactics of its management and condition of the patient at hospitalization

Fiks D. O.

National Pirogov Memorial Medical University, Vinnytsya, Ukraine

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CORRESPONDING AUTHOR

e-mail: d.fix@i.ua

Fiks D. O.

Determining importance in discussing the consequences of acute cerebrovascular accident (death, disability, complicated and severe course) is given to age, time since the onset of the disease, level of consciousness, severity of stroke, tactics and organization of medical and diagnostic process. The purpose of the work is to establish the dependence of medical and demographic indicators with risk factors for stroke and the organization of treatment and diagnostic process in patients of hospitals in Vinnytsia for the period 2017-2019, participating in the international program of the European Stroke Organization. The stroke register was created on the basis of the RES-Q report form of Vinnytsia hospitals, which are the most typical for the Podillia region of Ukraine. Estimation of correlations of medical and demographic indicators with unmodified factors of stroke, tactics of its management and condition of the patient at hospitalization was carried out by means of a statistical package "Statistica 5.5" with use of Pearson's statistics. The main features of the studied correlations are: with unmodified stroke factors - regardless of sex, patients of both hospitals have inverse weak correlations age of patients with the ability to pass 10 m and direct weak correlations with mortality; with patient status on admission - regardless of sex, patients in both hospitals have reversed mean strength correlations of ability to pass 10 m with level of consciousness, NIHSS stroke severity and NIHSS stroke scores, and direct, mostly medium-strength correlations with scores on the Glasgow scale, and with a mortality rate established a symmetrically opposite picture of correlations, in addition, with the duration of treatment established multidirectional reliable weak strength correlations; with indicators of quality of medical care - regardless of sex, patients of both hospitals have weak correlations, the ability to walk 10 m with an indicator or hospitalized patient to stroke block and the appointment of antithrombotics and direct weak force correlations with statins, with an indicator of treatment duration regardless from sex in patients of both hospitals established weak direct correlations with the appointment of antithrombotic drugs, and with the mortality rate in both hospitals, more pronounced in men, established direct weak and medium strength correlations with the appointment of antithrombotic drugs and inverse weak and medium strength correlations with the appointment of statins and antihypertensive drugs. Thus, numerous direct and inverse, mainly weak strength correlations of age, season, admission status and specifics of treatment and diagnostic measures with duration of treatment, functional outcome and stroke mortality for each hospital in general and individually in men and women of relevant medical institutions.

Keywords: correlations, age, duration of treatment, level of consciousness, stroke scale, mortality, stroke block.

Introduction

Currently in Ukraine, disability and mortality rates due to stroke in all age groups have pronounced negative trends [4, 7]. The main reasons for this situation are: low awareness of the population about the factors and

symptoms of stroke, stress, meteorological factors, hypertension, hypercholesterolemia, obesity and others. It is important to add that the patient's condition at the time of hospitalization and the quality of medical care are important

in determining the prognosis for survival and recovery [13, 14, 17].

To identify the factors influencing the course and consequences of stroke, it is most appropriate to build a multifactorial statistical dependence, for which it is necessary to correctly select the analyzed indicators [6]. In the works devoted to the analysis of the epidemiological situation, there are a number of indicators that, in the opinion of one or another author, have the greatest impact on the studied processes. However, the most important thing is that they (indicators) are in the greatest correlation or interaction with socio-demographic processes. It is important to assess the impact of a number of modified, unmodified and organizational factors - the main medical and demographic indicators, which are accepted as effective features [16, 18].

In selecting parameters that affect the dynamics of mortality, duration of treatment and rehabilitation prognosis (functional outcome at the time of discharge), in our study we proceeded from the assumption that the greatest impact on the epidemiological situation will have parameters that characterize living standards and health.

The purpose of the work is to establish the dependence of medical and demographic indicators with risk factors for stroke and the organization of treatment and diagnostic process in patients of hospitals in Vinnytsia for the period 2017-2019, participating in the international program of the European Stroke Organization.

Materials and methods

The analysis of the results of medical histories of patients hospitalized in an emergency according to the

indications to the stroke unit of the Municipal non-profit enterprise "Vinnytsia Regional Clinical Psychoneurological Hospital named after Academician O. I. Yushchenko of Vinnytsia Regional Council" (VRCPNH) or Vinnytsia City Clinical Hospital of Emergency Medical Services (VCCHEMS) for the period 2017-2019 with a diagnosis of acute cerebrovascular accident (ACA). These medical institutions are the most typical for the Podillia region of Ukraine (the territory of Vinnytsia, most of Khmelnytsky, part of Ternopil and small adjacent territories of Zhytomyr and Cherkasy regions). A certified neurologist filled in the RES-Q report form for each individual case after inpatient treatment - a special report forms in an international program developed by the ESO-EAST initiative of the European Stroke Organization (ESO). These hospitals have been participating in this program since 2017.

Estimation of correlations of medical and demographic indicators with unmodified factors of stroke, tactics of its management and condition of the patient at hospitalization was carried out by means of the statistical package "Statistica 5.5" (licensed № AXXR910A374605FA) using Pearson's statistics.

Results

The results of the correlations between duration of treatment, the ability to walk 10 m or mortality with unmodified stroke factors, admission status and indicators of quality of care in patients with VRCPNH and VCCHEMS are presented in tables 1-3.

Discussion

It is believed that when discussing the consequences

Table 1. Correlations between treatment duration and unmodified stroke factors, admission status indicators, and health care quality indicators.

Hospital	Indicators										
	AGE	D_GO2	GDIB	RS	NIHSRV	SH_KG	NIHSS	KT_G	ATZ	STAT	ANTIG
VRCPNH	-0.04	0.03	0.02	0.10	0.10	-0.05	0.12	-0.04	0.07	-0.04	0.02
	p=.111	p=.196	p=.364	p=.000	p=.000	p=.067	p=.000	p=.111	p=.007	p=.109	p=.364
	n=1380	n=1390	n=1357	n=1384	n=1362	n=1314	n=1364	n=1380	n=1336	n=1355	n=1357
VCCHEMS	-0.09	0.00	-0.01	-0.08	-0.08	0.10	-0.10	0.00	0.07	-0.06	0.09
	p=.000	p=.979	p=.785	p=.004	p=.003	p=.000	p=.001	p=.892	p=.004	p=.019	p=.001
	n=1581	n=1581	n=1575	n=1231	n=1264	n=1478	n=1201	n=1535	n=1538	n=1511	n=1537
VRCPNH male	0.06	0.03	0.01	0.14	0.11	-0.17	0.14	-0.11	0.10	-0.07	0.04
	p=.077	p=.419	p=.823	p=.000	p=.002	p=.000	p=.000	p=.001	p=.005	p=.049	p=.200
	n=860	n=861	n=858	n=857	n=845	n=814	n=845	n=854	n=851	n=844	n=843
VRCPNH female	-0.06	0.05	0.01	0.05	0.10	0.01	0.10	0.03	0.03	0.00	-0.01
	p=.192	p=.272	p=.794	p=.264	p=.021	p=.800	p=.026	p=.436	p=.510	p=.922	p=.845
	n=526	n=528	n=527	n=526	n=516	n=499	n=518	n=525	n=514	n=510	n=513
VCCHEMS male	-0.10	-0.03	0.02	-0.08	-0.08	0.09	-0.06	0.03	0.14	-0.12	0.11
	p=.005	p=.398	p=.498	p=.054	p=.036	p=.019	p=.106	p=.370	p=.000	p=.001	p=.002
	n=806	n=806	n=801	n=625	n=662	n=750	n=626	n=780	n=788	n=774	n=786

Continuation of table 1.

Hospital	Indicators										
	AGE	D_GO2	GDIB	RS	NIHSRV	SH_KG	NIHSS	KT_G	ATZ	STAT	ANTIG
VCCHEMS female	-0.08	0.03	-0.04	-0.08	-0.08	0.11	-0.13	-0.04	0.00	0.01	0.06
	p=.019	p=.345	p=.267	p=.038	p=.042	p=.004	p=.002	p=.331	p=.904	p=.815	p=.098
	n=770	n=780	n=769	n=606	n=601	n=770	n=574	n=750	n=745	n=733	n=746

Notes: here and hereafter, reliable direct correlation are highlighted in red; blue color highlighted feedback; AGE - age of patients; D_GO2 - time of year when the stroke occurred; GDIB - whether the patient is hospitalized for stroke unit; RS - level of consciousness; NIHSRV - stroke severity on the NIHSS scale; SH_KG - points on the Glasgow scale; NIHSS - points on the NIHSS stroke scale; KT_G - whether the CT examination was performed within 1 hour; ATZ - appointment of antithrombolytic drugs; STAT - prescription of statins; ANTIG - appointment of antihypertensive drugs.

Table 2. Correlations of the indicator of the ability to walk 10 m with unmodified factors of stroke, indicators of admission status and indicators of quality of medical care.

Hospital	Indicators										
	AGE	D_GO2	GDIB	RS	NIHSRV	SH_KG	NIHSS	KT_G	ATZ	STAT	ANTIG
VRCPNH	-0.13	-0.02	-0.13	-0.34	-0.46	0.18	-0.51	-0.05	-0.22	0.23	0.03
	p=.000	p=.463	p=.000	p=.000	p=.000	p=.000	p=.000	p=.088	p=.000	p=.000	p=.287
	n=1389	n=1392	n=1388	n=1387	n=1365	n=1324	n=1367	n=1382	n=1379	n=1369	n=1370
VCCHEMS	-0.21	-0.02	-0.22	-0.36	-0.41	0.40	-0.51	0.02	-0.11	0.14	0.07
	p=.000	p=.537	p=.000	p=.000	p=.000	p=.000	p=.000	p=.490	p=.000	p=.000	p=.004
	n=1531	n=1531	n=1525	n=1191	n=1220	n=1442	n=1169	n=1487	n=1520	n=1498	n=1519
VRCPNH male	-0.09	-0.03	-0.11	-0.35	-0.47	0.35	-0.56	-0.05	-0.23	0.26	0.00
	p=.010	p=.431	p=.001	p=.000	p=.000	p=.000	p=.000	p=.167	p=.000	p=.000	p=.984
	n=864	n=865	n=862	n=862	n=850	n=820	n=850	n=858	n=859	n=852	n=852
VRCPNH female	-0.17	-0.01	-0.17	-0.32	-0.43	0.12	-0.45	-0.05	-0.21	0.18	0.09
	p=.000	p=.869	p=.000	p=.000	p=.000	p=.009	p=.000	p=.239	p=.000	p=.000	p=.051
	n=524	n=526	n=525	n=524	n=514	n=503	n=516	n=523	n=519	n=516	n=517
VCCHEMS male	-0.13	0.01	-0.19	-0.31	-0.40	0.35	-0.48	0.06	-0.09	0.14	0.05
	p=.000	p=.825	p=.000	p=.000	p=.000	p=.000	p=.000	p=.129	p=.017	p=.000	p=.145
	n=782	n=782	n=777	n=605	n=639	n=732	n=610	n=756	n=779	n=767	n=777
VCCHEMS female	-0.27	-0.04	-0.26	-0.39	-0.42	0.43	-0.52	-0.02	-0.14	0.16	0.11
	p=.000	p=.323	p=.000	p=.000	p=.000	p=.000	p=.000	p=.574	p=.000	p=.000	p=.003
	n=744	n=744	n=743	n=586	n=580	n=706	n=558	n=726	n=736	n=727	n=737

Notes: here and hereafter, a reliable medium-strength correlation is highlighted in yellow.

of acute cerebrovascular accident (death, disability, complicated and severe course) is often determined by age, time since the onset of the disease, level of consciousness, severity of stroke, tactics and organization of treatment and diagnostic process [2, 3, 9, 10, 12, 15].

Of fundamental importance for the organization of care for patients with ACA have works in which it was found that neuroimaging and primary neuroprotective therapy should begin within the "therapeutic window" and that their implementation during this period reduces mortality and disability due to stroke [1, 5, 8]. At the same time, a number of authors point to the leading role of the nature, location and extent of brain damage [11].

Analysis of the correlations between the duration of

treatment, the ability to pass 10 m and the mortality rate with unmodified stroke factors showed that in both VRCPNH and VCCHEMS only the age of patients has a significant weak correlations, namely: regardless of sex inverse (r = from -0.09 to -0.27) with the ability to pass 10 m; mostly regardless of sex direct (r = from 0.08 to 0.11) with mortality (except for women treated in VRCPNH); only in patients treated in VCCHEMS regardless of sex reversible (r = from -0.08 to -0.10) with the duration of treatment. No reliable relationship has been established with the time of year when the stroke occurred.

The analysis of correlations of indicators of duration of treatment, possibility to pass 10 m and mortality indicator with indicators of a condition of patients at receipt showed

Table 3. Correlations between mortality rate and unmodified stroke factors, admission status indicators, and health care quality indicators.

Hospital	Indicators										
	AGE	D_GO2	GDIB	RS	NIHSRV	SH_KG	NIHSS	KT_G	ATZ	STAT	ANTIG
VRCPNH	0.06	0.00	0.01	0.23	0.18	-0.15	0.20	-0.03	0.14	-0.08	-0.14
	p=.021	p=.998	p=.811	p=.000	p=.000	p=.000	p=.000	p=.271	p=.000	p=.002	p=.000
	n=1458	n=1461	n=1457	n=1455	n=1432	n=1385	n=1434	n=1451	n=1398	n=1384	n=1387
VCCHEMS	0.10	-0.04	0.06	0.25	0.22	-0.24	0.24	-0.08	0.31	-0.20	-0.33
	p=.000	p=.145	p=.011	p=.000	p=.000	p=.000	p=.000	p=.002	p=.000	p=.000	p=.000
	n=1631	n=1631	n=1625	n=1282	n=1305	n=1520	n=1237	n=1578	n=1583	n=1556	n=1581
VRCPNH male	0.08	0.04	-0.04	0.18	0.16	-0.22	0.17	0.03	0.17	-0.12	-0.20
	p=.020	p=.220	p=.274	p=.000	p=.000	p=.000	p=.000	p=.446	p=.000	p=.000	p=.000
	n=899	n=900	n=897	n=896	n=883	n=853	n=883	n=893	n=871	n=863	n=864
VRCPNH female	0.02	-0.05	0.06	0.28	0.20	-0.13	0.22	-0.07	0.06	0.02	0.01
	p=.617	p=.243	p=.166	p=.000	p=.000	p=.004	p=.000	p=.103	p=.177	p=.684	p=.765
	n=558	n=560	n=559	n=558	n=548	n=531	n=550	n=557	n=526	n=520	n=522
VCCHEMS male	0.11	-0.03	0.04	0.29	0.19	-0.23	0.20	-0.07	0.32	-0.21	-0.35
	p=.001	p=.326	p=.221	p=.000	p=.000	p=.000	p=.000	p=.054	p=.000	p=.000	p=.000
	n=833	n=833	n=828	n=655	n=683	n=774	n=645	n=804	n=811	n=797	n=809
VCCHEMS female	0.10	-0.04	0.09	0.22	0.25	-0.25	0.26	-0.08	0.29	-0.20	-0.30
	p=.005	p=.294	p=.015	p=.000	p=.000	p=.000	p=.000	p=.020	p=.000	p=.000	p=.000
	n=794	n=794	n=793	n=627	n=621	n=743	n=591	n=770	n=768	n=756	n=768

that the same type of reliable correlations irrespective of hospital and sex is observed only for indicators of possibility to pass 10 m and mortality, namely: feedback of average force ($r = -0.31$ to -0.56) correlations of the ability to walk 10 m with the level of consciousness, stroke severity on the NIHSS scale and scores on the NIHSS stroke scale and direct, mostly medium strength ($r =$ from 0.35 to 0.43) correlations with Glasgow scale scores (greater strength in patients treated in VCCHEMS); with a mortality rate, a symmetrically opposite pattern of connections - lines of weak force ($r =$ from 0.16 to 0.29) correlations with the level of consciousness, stroke severity on the NIHSS scale and scores on the NIHSS stroke scale and inverse weak force ($r =$ from -0.15 to -0.25) correlations with Glasgow scores (also higher in patients treated in VCCHEMS). The duration of treatment has different significant weak correlations with the status of patients on admission to different hospitals, namely: direct correlations ($r =$ from 0.10 to 0.14) with the level of consciousness, stroke severity on the NIHSS scale and NIHSS stroke scale scores in patients treated in VRCPNH and feedback ($r =$ from -0.08 to -0.13) of these indicators in patients treated in VCCHEMS; conversely, an inverse ($r = -0.17$) correlations to Glasgow scores in men treated with VRCPNH and direct ($r = 0.09$ to 0.11) correlations with this indicator in patients treated with VCCHEMS.

Analysis of the correlations between the duration of treatment, the ability to walk 10 m and mortality with

indicators of quality of care, in most cases, showed almost the same nature of reliable weak correlations regardless of hospital and sex only for the ability to walk 10 m, namely: reverse ($r =$ from -0.09 to -0.26) with an indicator whether patient was hospitalized to stroke block and the appointment of antithrombotic drugs and direct ($r =$ from 0.14 to 0.26) with the appointment of statins; no reliable connections were established with the indicator whether the CT examination was performed within 1 hour, and with the indicator of antihypertensive drugs appointment direct ($r = 0.07$ and 0.11) correlations were established only in patients treated in VCCHEMS (due to more pronounced correlations in women). With the duration of treatment, significant weak strength direct ($r =$ from 0.07 to 0.14) correlations were established in both hospitals with the appointment of antithrombotic drugs; direct ($r = 0.09$ and 0.11) correlations only in patients treated in VCCHEMS (due to more pronounced correlations in men) with the appointment of antihypertensive drugs; feedback ($r = -0.07$ and -0.12) in men treated in both hospitals with statins; with an indication of whether the patient was hospitalized for stroke and whether a CT scan was performed within 1 hour, no reliable correlations were established in both hospitals. Significant direct weak correlations ($r =$ from 0.14 to 0.29) and medium strength ($r = 0.31$ and 0.32) in both hospitals with the appointment of antithrombotic drugs (more pronounced in VCCHEMS) and reverse weak ($r =$ from -0.08 to -0.21)

and medium strength (r = from -0.30 to -0.35) correlations in both hospitals with the appointment of statins and antihypertensive drugs (also more pronounced in VCCHEMS) were established with the mortality rate; only direct correlations of weak force (r = 0.06 and 0.09) were established with the indicator whether the patient was hospitalized to the stroke block only in patients treated in VCCHEMS (due to more pronounced correlations in women); with an indication of whether a CT scan was performed within 1 hour, only weak feedback (r = 0.08 in both cases) was found only in patients treated in VCCHEMS (due to more pronounced correlations in women).

It should be emphasized that the selection and isolated discussion of the factors influencing the outcome of strokes is conditional and subjective, as the course and outcome

of stroke depends on their rigid relationship and interdependence. Determining and analyzing the impact of a set of medical and demographic factors, based on statistical methods, is currently the best tool for objectifying the feasibility of early hospitalization, neuroimaging and treatment or neurorehabilitation [6].

Conclusions

Numerous direct and inverse, mainly weak strength correlations of age, season, admission status and specifics of treatment and diagnostic measures with duration of treatment, functional outcome and stroke mortality have been established for each hospital as a whole and separately for men and women of correspond medical institutions.

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КОРЕЛЯЦІЇ МЕДИКО-ДЕМОГРАФІЧНИХ ПОКАЗНИКІВ ІЗ НЕМОДИФІКОВАНИМИ ЧИННИКАМИ ІНСУЛЬТУ, ТАКТИКОЮ ЙОГО ВЕДЕННЯ ТА СТАНОМ ПАЦІЄНТА ПРИ ГОСПІТАЛІЗАЦІЇ

Фікс Д. О.

Визначальне значення при обговоренні проблеми наслідків гострого порушення мозкового кровообігу (смерть, інвалідність, ускладнений та важкий перебіг) надається віку, часу з моменту виникнення захворювання, рівню свідомості, ступеню

важкості інсульту, тактики і організації лікувально-діагностичного процесу. Мета роботи - встановити залежність медико-демографічних показників із факторами ризику інсульту та організації лікувально-діагностичного процесу у пацієнтів лікарень м. Вінниця за період 2017-2019 рр., що приймають участь в міжнародній програмі Європейського товариства інсульту. Інсультний реєстр створено на основі форми звіту RES-Q лікарень м. Вінниця, які є найбільш типовими для Подільського регіону України. Оцінка кореляцій медико-демографічних показників із немодифікованими чинниками інсульту, тактикою його ведення та станом пацієнта при госпіталізації проведена за допомогою статистичного пакету "Statistica 5.5" з використанням статистики Пірсона. Головними особливостями досліджуваних кореляцій є: з немодифікованими чинниками інсульту - незалежно від статі у пацієнтів обох лікарень встановлені зворотні слабкої сили зв'язки віку пацієнтів з можливістю пройти 10 м і прямі слабкої сили зв'язки зі смертністю; з показниками стану пацієнтів при надходженні - незалежно від статі у пацієнтів обох лікарень встановлені зворотні середньої сили зв'язки можливості пройти 10 м із рівнем свідомості, важкістю інсульту за шкалою NIHSS і балами за шкалою інсульту NIHSS та прямі, переважно середньої сили зв'язки з балами за шкалою Глазго, а з показником смертності встановлена симетрично протилежна картина зв'язків, крім того, з тривалістю лікування встановлені різноспрямовані достовірні слабкої сили зв'язки; з показниками індикаторами якості медичної допомоги - незалежно від статі у пацієнтів обох лікарень встановлені слабкої сили зворотні зв'язки можливості пройти 10 м з показником чи госпіталізований пацієнт до інсультного блоку та призначенням антитромболітичних засобів і прямі слабкої сили з призначенням статинів, з показником тривалості лікування незалежно від статі у пацієнтів обох лікарень встановлені слабкої сили прямі зв'язки з призначенням антитромболітичних засобів, а з показником смертності в обох лікарнях, більш виражено у чоловіків, встановлені прямі слабкої і середньої сили зв'язки із призначенням антитромболітичних засобів та зворотні слабкої і середньої сили зв'язки із призначенням статинів і антигіпертензивних препаратів. Таким чином, встановлені багаточисельні прямі та зворотні, переважно слабкої сили, зв'язки віку, сезону, стану при надходженні та специфіки лікувально-діагностичних заходів із тривалістю лікування, функціональним результатом і смертністю від інсульту як для кожної лікарні загалом, так і окремо у чоловіків і жінок відповідних лікувальних закладів.

Ключові слова: кореляції, вік, тривалість лікування, рівень свідомості, шкала інсульту, смертність, інсультний блок.

КОРРЕЛЯЦИИ МЕДИКО-ДЕМОГРАФИЧЕСКИХ ПОКАЗАТЕЛЕЙ С НЕМОДИФИЦИРОВАННЫМИ ФАКТОРАМИ ИНСУЛЬТА, ТАКТИКОЙ ЕГО ВЕДЕНИЯ И СОСТОЯНИЕМ ПАЦИЕНТА ПРИ ПОСТУПЛЕНИИ

Фикс Д. А.

Определяющее значение при обсуждении проблемы последствий острого нарушения мозгового кровообращения (смерть, инвалидность, осложненное и тяжелое течение) предоставляется возрасту, времени с момента возникновения заболевания, уровню сознания, степени тяжести инсульта, тактики и организации лечебно-диагностического процесса. Цель работы - установить зависимость медико-демографических показателей с факторами риска инсульта и организации лечебно-диагностического процесса у пациентов больниц г. Винница за период 2017-2019 гг., принимающих участие в международной программе Европейского общества инсульта. Инсультный реестр создан на основе формы отчета RES-Q больниц г. Винница, которые являются наиболее типичными для Подольского региона Украины. Оценка корреляций медико-демографических показателей с немодифицированными факторами инсульта, тактика его ведения и состояние пациента при поступлении проведена с помощью статистического пакета "Statistica 5.5" с использованием статистики Пирсона. Главными особенностями исследуемых корреляций являются: с немодифицированными факторами инсульта - независимо от пола у пациентов обеих больниц установлены обратные слабой силы связи возраста пациентов с возможностью пройти 10 м и прямые слабой силы связи со смертностью; с показателями состояния пациентов при поступлении - независимо от пола у пациентов обеих больниц установлены обратные средней силы связи возможности пройти 10 м с уровнем сознания, тяжестью инсульта по шкале NIHSS и баллами по шкале инсульта NIHSS и прямые, преимущественно средней силы связи с баллами по шкале Глазго, а с показателем смертности установлена симметрично противоположная картина связей, кроме того, с продолжительностью лечения установлены разнонаправленные достоверные слабой силы связи; с показателями индикаторами качества медицинской помощи - независимо от пола у пациентов обеих больниц установлены слабой силы обратные связи возможности пройти 10 м с показателем или госпитализирован пациент в инсультный блок и назначением антитромболитических средств и прямые слабой силы с назначением статинов, с показателем продолжительности лечения независимо от пола у пациентов обеих больниц установлены слабой силы прямые связи с назначением антитромболитических средств, а с показателем смертности в обеих больницах, более выражено у мужчин, установлены прямые слабой и средней силы связи с назначением антитромболитических средств и обратные слабой и средней силы связи с назначением статинов и антигипертензивных препаратов. Таким образом, установлены множественные достоверные прямые и обратные, преимущественно слабой силы, связи возраста, сезона, состояния при поступлении и специфичности лечебно-диагностических мероприятий с продолжительностью лечения, функциональным результатом и смертностью от инсульта как для каждой больницы вообще, так и отдельно у мужчин и женщин соответствующих лечебных учреждений.

Ключевые слова: корреляции, возраст, длительность лечения, уровень сознания, шкала инсульта, смертность, инсультный блок.