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BIOPHYSICAL REALITY OF THE TRADITIONAL RULE "BIOLOGICAL CLOCK"

(INFORMATION 5)

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Identification system based on acupuncture channels points to the inadequacy of the traditional provisions of the "BIOLOGICAL CLOCK". Open patterns require correction of the relevant curricula of traditional Chinese Zhen-Jiu therapy.

Key words: acupuncture, a Large circle of energy circulation, errors, Zhen-Tszyu therapy, functional vegetology

Ідентифікація системної залежності акупунктурних каналів указує на невідповідність традиційного правила "БІОЛОГІЧНИЙ ГОДИННИК" біофізичній реальності. Відкриті закономірності вимагають корекції відповідних учбових програм традиційної китайської Чжень-цзю терапії.

Ключові слова: акупунктура, Велике коло енергетичної циркуляції, помилки Чжень-цзю терапії, функціональна вегетологія,

Идентификация системной зависимости акупунктурных каналов указывает на несоответствие традиционного правила "БИОЛОГИЧЕСКИЕ ЧАСЫ" биофизической реальности. Открытые закономерности требуют коррекции соответствующих учебных программ традиционной китайской Чжень-цзю терапии.

Ключевые слова: акупунктура, Большой круг энергетической циркуляции, ошибки Чжень-цзю терапии, функциональная вегетология

Introduction

Before analyzing these histograms remind the international nomenclature acupuncture channels (MAN), which we always enjoy. In this case, we note that submissions are unparalleled and is the intellectual property of authors discovery "Functional-vegetative system of Rights" (Makats V.G., Makats E.F., Makats Dm.V. and Makats Den.V.).

TRADITIONAL CHANNEL	IAN*	FN	TRADITIONAL CHANNEL	IAN*	FN
LIGHT	LU	P	BLADDER	BL	V
THICK THE INTESTINES	LI	GI	KIDNEY	KI	R
STOMACH	ST	E	THE PERICARDIUM	PC	MC
SPLEEN – PANCREAS HEART	SP	RP	TRIPLE OGHRA	TE	TR
HEART	HT	C	GALL BLADDER	GB	VB
THIN THE INTESTINES	SI	IG	LIVER	LR	F

Abbreviation of acupunctural channels (IAN)

EMPIRICAL BASES OF THE RULE "BIOLOGICAL CLOCK"

Traditional idea about the Big cycle and two-hour activity of systemic *YIN-YANG* complexes conditions hypothetical reality of the next traditional rule – Internal biological clock.

Traditional rule INTERNAL BIOLOGICAL CLOCK through the Big cycle of energy *QI* circulation (fig.1). According to the rule, circulation of energy in two paired branches of twelve channels (*meridians*) is subordinated to two-hour's biological rhythm (*the delay*) in the complexes of PAIRED CHANNELS (LU-LI, BL-KI, GB-LR, SI-HT, TE-PC and ST-SP), which conditions characteristic sequence of maximal and minimal activity of separate elements (organs).

According to Biological clock "maximal-minimal" system activity is represented by the following: Lungs (LU) 3-5=15-17 hrs., Large Intestine (LI) 5-7=17-19 hrs., Stomach (ST) 7-9= 19-21 hrs., Spleen-Pancreas (SP) 9-11=21-23 hrs., Heart (HT) 11-12= 23-1 hrs., Small Intestine (SI) 13-15=1-3 hrs., Urinary Bladder (BL) 15- 17=3-5 hrs., Kidneys (KI) 17-19= 5-7 hrs., Pericardium (PC) 19-21=7-9 hrs., Lymphatic system-Triple Ener-

gizer (TE) 21-23=9-11 hrs., Gall Bladder (GB) 23-1=11-13 hrs., and Liver (LR) 1-3=13-15 hrs. (tab.1).

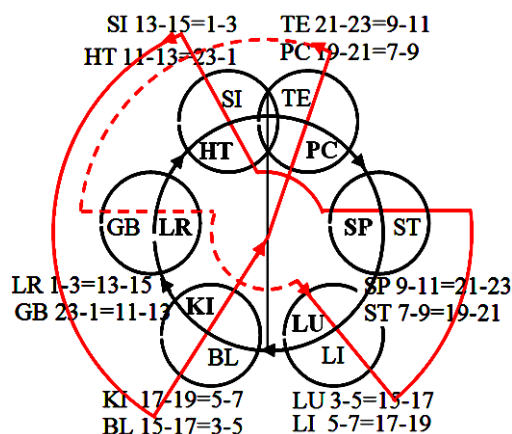


Fig.1 Biological clock

Table 1

ACTIVITY OF FUNCTIONAL SYSTEMS (FS) ACCORDING TO DAY HOURS

FS	ACTIVITY		FS	ACTIVITY	
	max	min		max	min
LU	3-5	15-17	BL	15-17	3-5
LI	5-7	17-19	KI	17-19	5-7
ST	7-9	19-21	PC	19-21	7-9
SP	9-11	21-23	TE	21-23	9-11
HT	11-13	23-1	GB	23-1	11-13
SI	13-15	1-3	LR	1-3	13-15

Canonical theory states, that sequ-ence-dependent energy transition with two-hour's delay of energy activity in complexes of Paired channels forms closed daily cycle.

It should be noted, that the rule is being partially used today in practical chronobiology, finding certain analogy with cicada's biological rhythms. The latter, from the point of view of cosmobiology, are resonance reflection of Big cosmic cycles, because many biological events concur with maximum and minimum of solar activity...

THE BIOPHYSICAL REALITY OF THE RULE "BIOLOGICAL CLOCK"

Bearing in mind the known functional dependence of the monthly activity and problematic issues, consider the daily systemic dependence during its New and Complete periods. The number of daily observations in the female group composed 3363 cases.

Biophysical analysis testifies to the following (fig. 2-13)...

Daily systemic activity during the phase of the New and Full Moon

According to the traditional rule, a daily maximum of the functional activity of **BL** is observed at 15-17 o'clock, and a minimal one at 3-5 o'clock (fig. 2). This provision has not been biophysically supported. At the same time, there is a typical similarity of the activity graphs throughout different phases of the Moon.

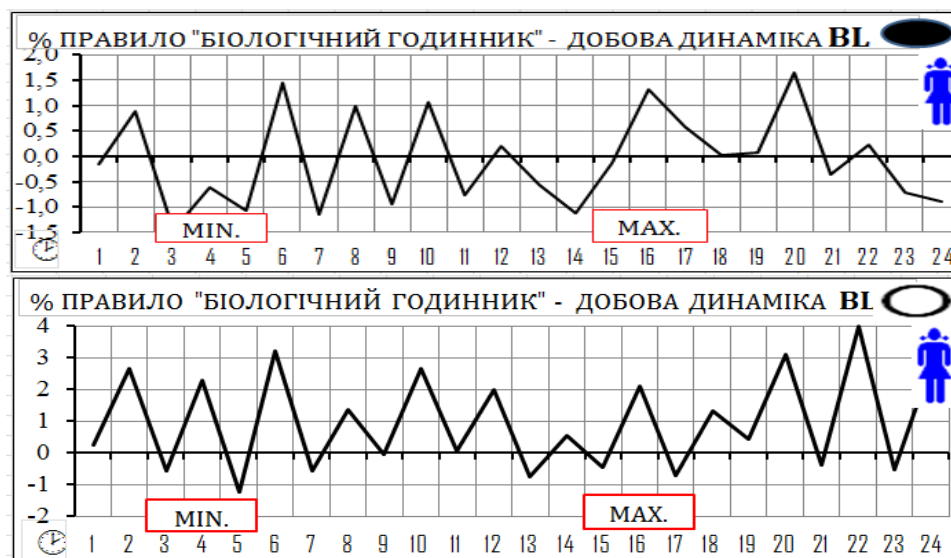


Fig.2 Dynamics of daily activity of **BL** during the phases of the new and full Moon.

According to the traditional rule, a daily maximum of functional activity of **KI** is observed at 17-19 o'clock, and a minimum at 5-7 o'clock (fig. 3). This provision has not been biophysically supported. At the same time, there is a typical similarity in the activity graphs in different phases of the Moon.

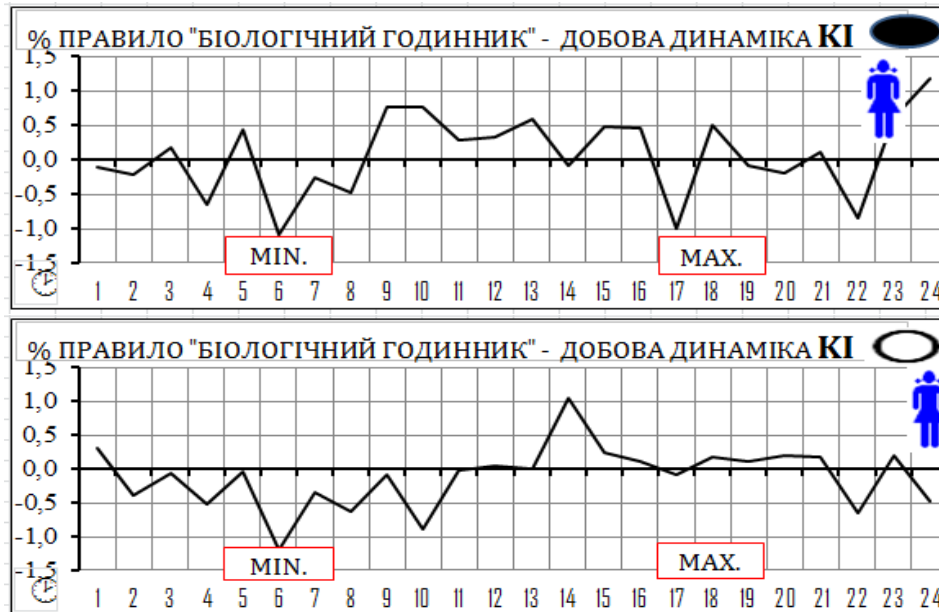


Fig.3 Dynamics of daily activity of **KI** during the phases of the new and full Moon.

According to the traditional rule, a daily maximum of functional activity of **PC** is observed at 19-21 o'clock, and a minimum activity at 7-9 o'clock (fig. 4). This provision has not been biophysically supported. At the same time, there is a typical similarity in the activity graphs in different phases of the Moon.

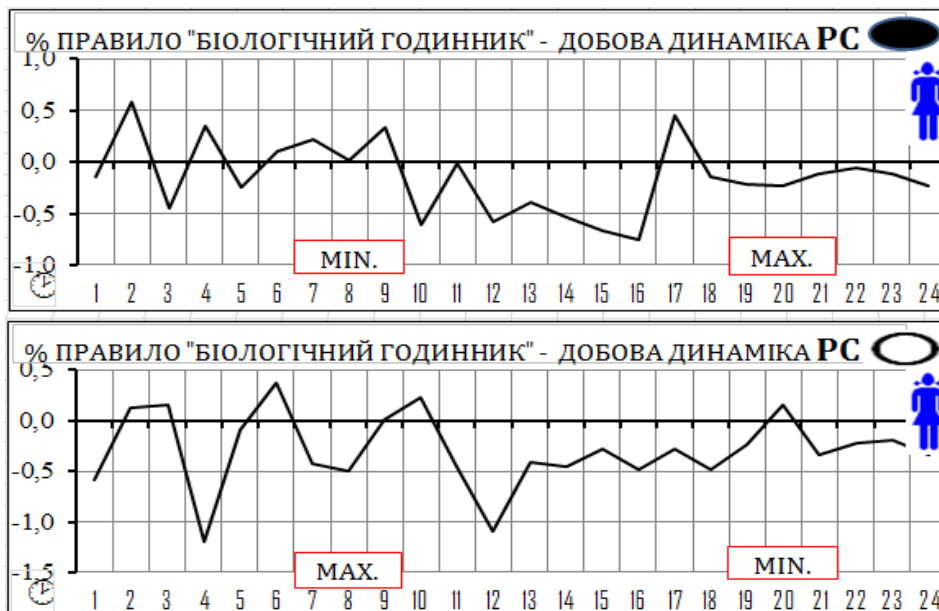


Fig.4 Dynamics of daily activity of **PC** during the phases of the new and full Moon.

According to the traditional rule, a daily maximum of functional activity of **TE** is observed at 21-23 o'clock, and the minimum at 9-11 o'clock (fig.5). This provision has not been biophysically supported. At the same time, there is a typical similarity in the activity graphs in different phases of the Moon.

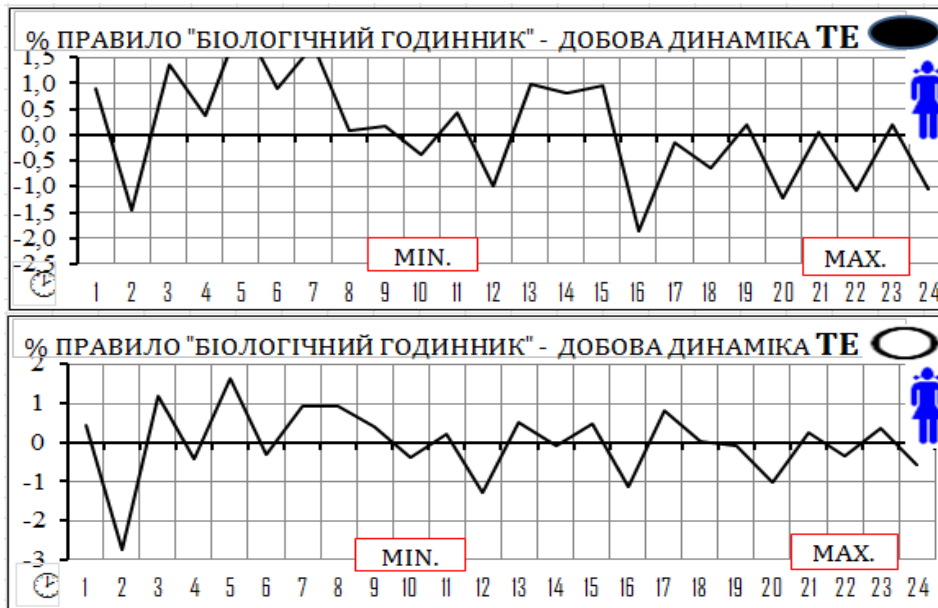


Fig.5 Dynamics of daily activity of **TE** during the phases of the new and full Moon.

According to the traditional rule, a daily maximum of functional activity of **GB** is observed at 23-1 o'clock, and the minimum at 11-13 o'clock (fig.6). This provision has not been biophysically supported. At the same time, there is a typical similarity in the activity graphs in different phases of the Moon.

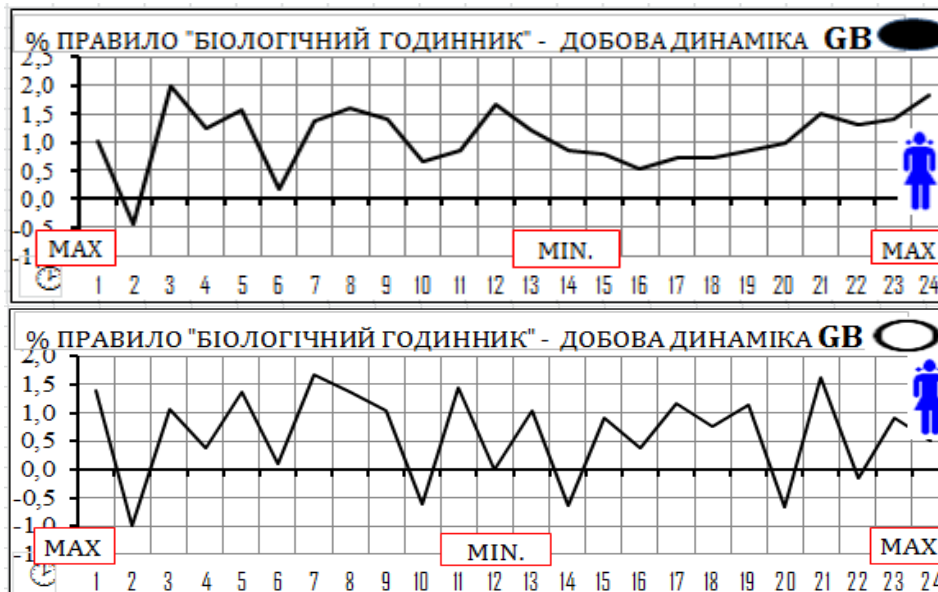


Fig.6 Dynamics **GB** daily activity during the phase of the new and full Moon.

According to the traditional rule, a daily maximum of functional activity of **LR** is observed at 15-17 o'clock, and a minimum at 3-5 o'clock (fig. 7). This provision has not been biophysically supported. At the same time, there is a typical similarity in the activity graphs in different phases of the Moon.

According to the traditional rule, a daily maximum of functional activity of **LU** is observed at 3-5 o'clock, and the minimum at 15-17 o'clock (fig. 8). This provision has not been biophysically supported. At the same time, there is a typical similarity in the activity graphs in different phases of the Moon.

According to the traditional rule, a daily maximum of functional activity of **LI** is observed at 5-7 o'clock, and the minimum at 17-19 o'clock (fig.9). This provision has not been biophysically supported. At the same time, there is a typical similarity in the activity graphs in different phases of the Moon.

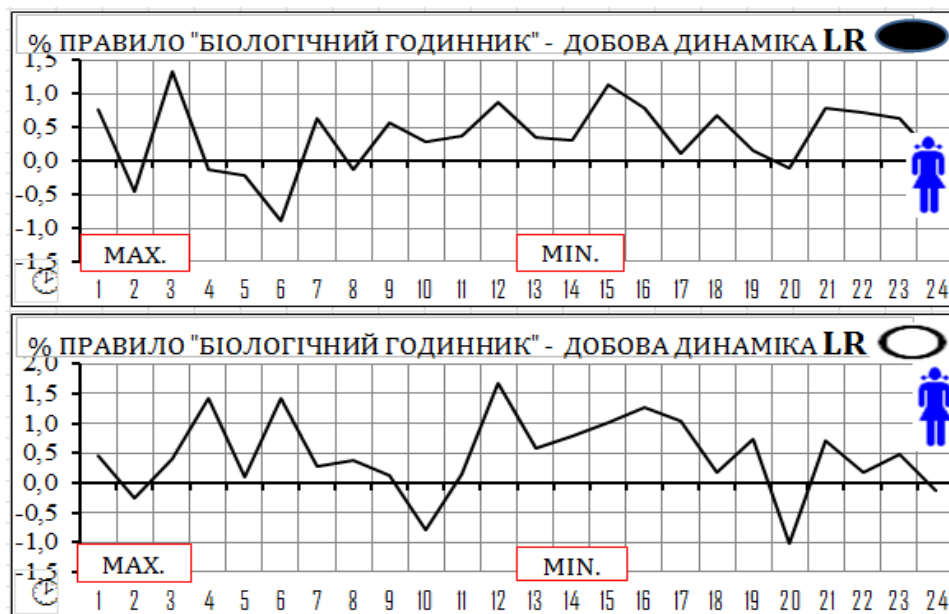


Fig.7 Dynamics of daily activity of **LR** during the phases of the new and full Moon.



Fig.8 Dynamics of daily activity of **LU** during the phases of the new and full Moon.

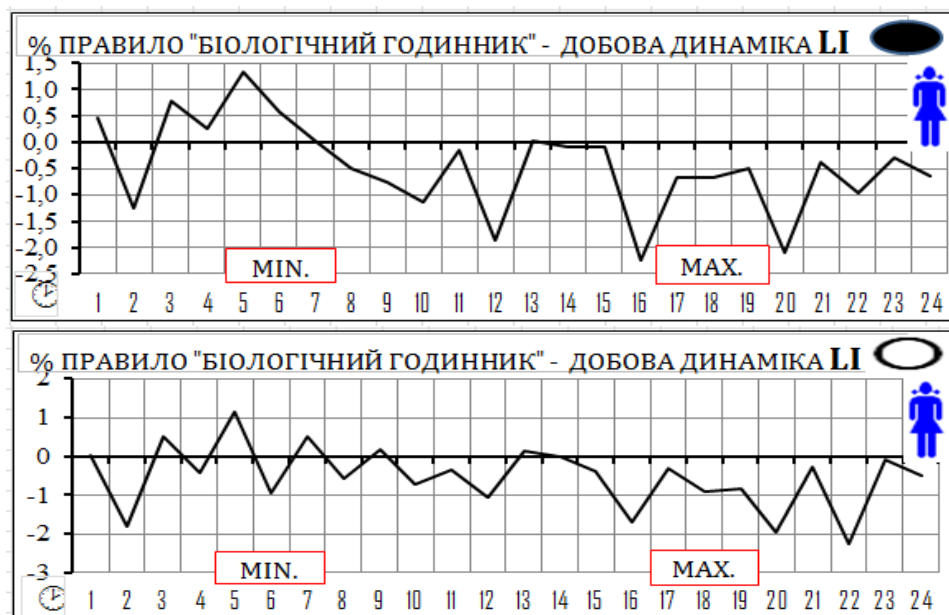


Fig.9 Dynamics of daily activity of **LI** during the phases of the new and full Moon.

According to the traditional rule, a daily maximum of functional activity of **ST** is observed at 7-9 o'clock, and the minimum at 19-21 o'clock (fig.10). This provision has not been biophysically supported. At the same time, there is a typical similarity in the activity graphs in different phases of the Moon.



Fig.10 Dynamics of daily activity of **ST** during the phases of the new and full Moon.

According to the traditional rule, a daily maximum of functional activity of **SP** is observed at 9-11 hours, and a minimum at 21-23 o'clock (fig.11). This provision has not been biophysically supported. At the same time, there is a typical similarity in the activity graphs in different phases of the Moon.

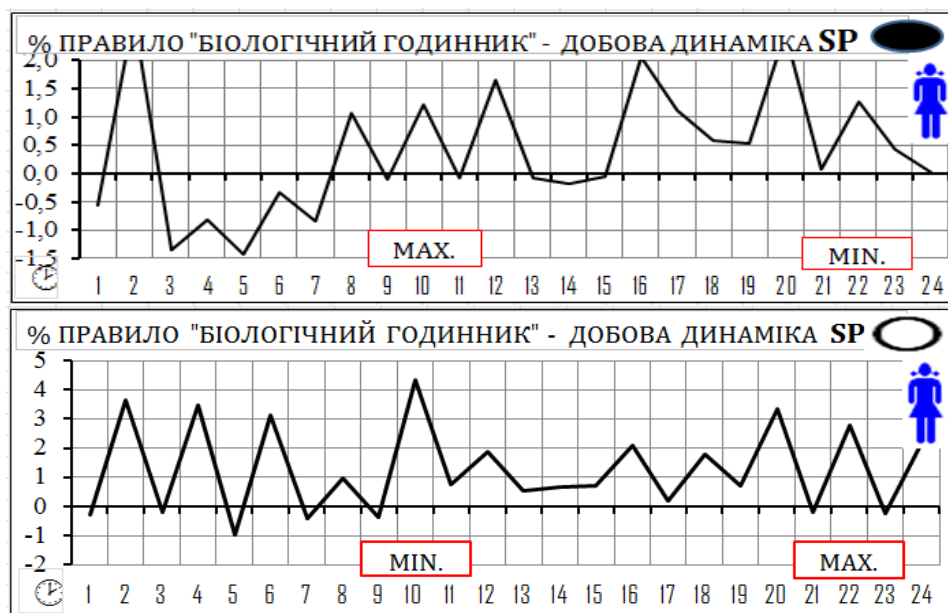


Fig.11 Dynamics of daily activity of **SP** during the phases of the new and full Moon.

According to the traditional rule, a daily maximum of functional activity of **HT** is observed at 11-13 o'clock, and the minimum at 23-1 o'clock (fig.12). This provision has not been biophysically supported. At the same time, there is a typical similarity in the activity graphs in different phases of the Moon.

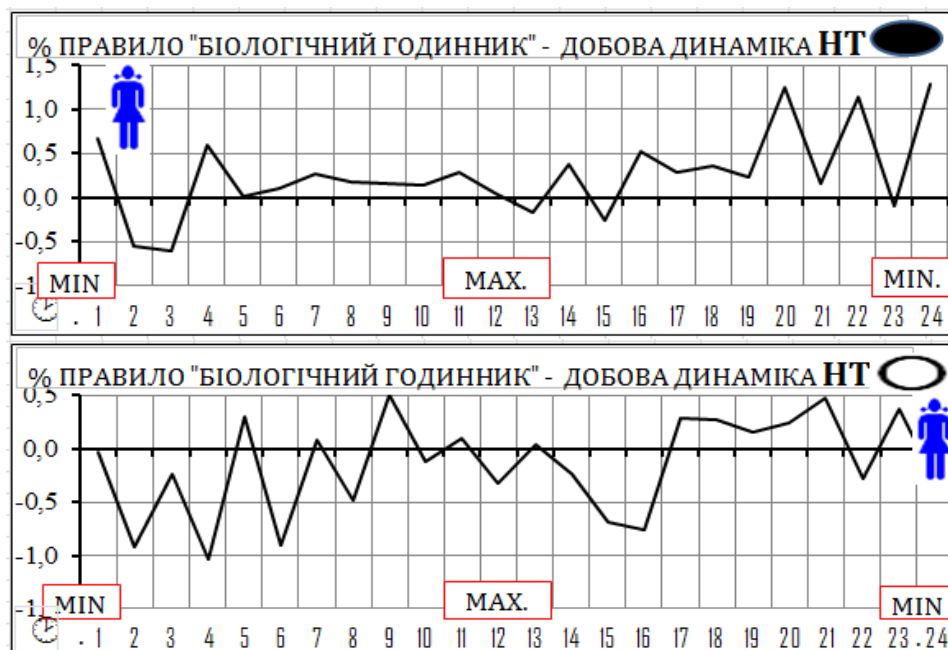


Fig.12 Dynamics of daily activity of **SP** during the phases of the new and full Moon.

According to the traditional rule, a daily maximum of functional activity of **SI** is observed at 15-17 o'clock, and a minimum at 3-5 o'clock (fig.13). This provision has not been biophysically supported. At the same time, there is a typical similarity in the activity graphs in different phases of the Moon.



Fig.13 Dynamics of daily activity of **SI** during the phases of the new and full Moon.

SPECIFICITY OF FUNCTIONAL DAILY BIORHYTHM

During the analysis of daily biorhythm, we found specific activity of the basic systems, **SP** and **BL**, of the first and second functional complexes. The latter manifested in their synchronous oppression during the odd hours of the day, and the excitation during the even hours. The discovered two-hour biorhythm turned out to be a functional systemic pacemaker (driver of the rhythm), stable in time and in the most vivid during the phase of the full Moon (fig. 14).

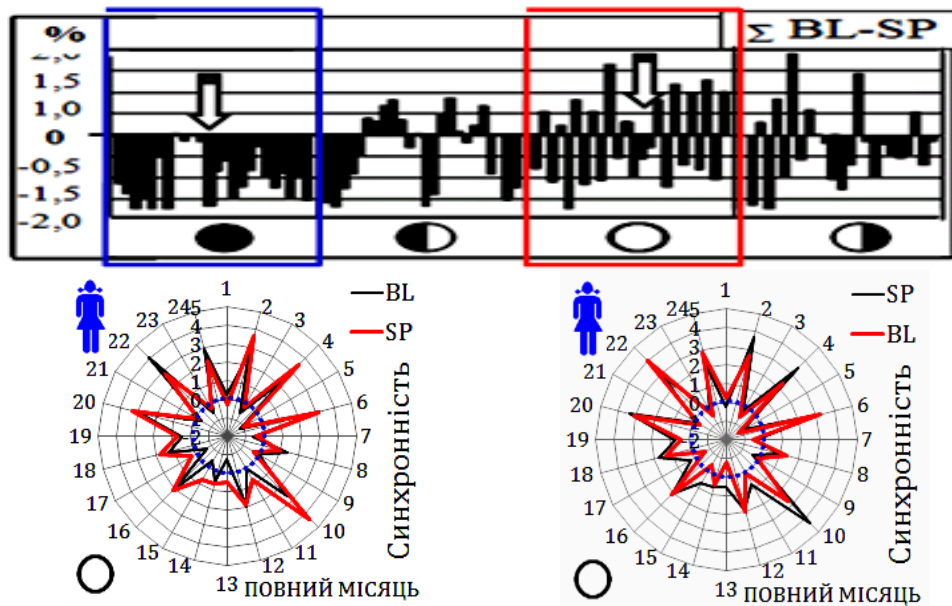


Fig.14 Peculiarities during the synchronous circadian biorhythm of the complexes BL-SP and SP-BL during even and odd hours of the full Moon phase.

The following is notable: during the phase of the New Moon, the activity of BL-SP is in the zone of parasympathetic activity; during the Full Moon, their dynamics acquires a vivid rhythm around the zone of vegetative equilibrium, while during the phases of the first and the fourth quarters - transitive forms. The phenomenon points to the specific activity of BL-SP, which during a day in “odd hours” are being oppressed, while in “paired hours” – excited. There is also certain specificity in the fluctuations of the mentioned systems around the area of their functional norm (fig. 15).

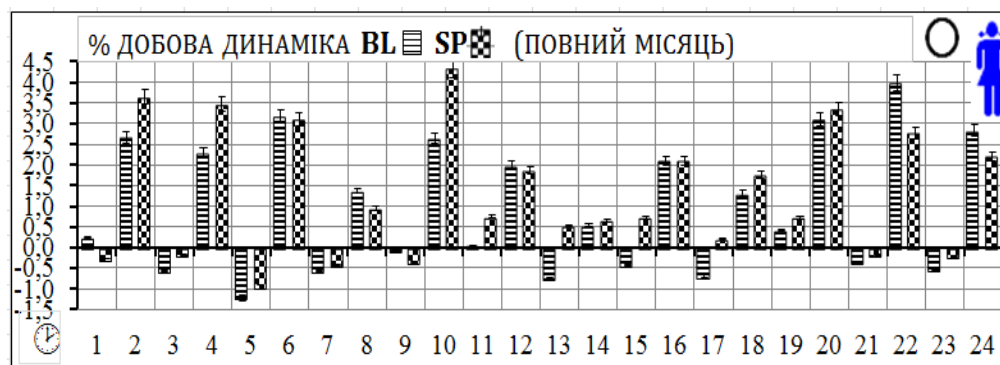


Fig.15 Dynamics of BL and SP during even and odd hours of the day (Phase of the full Moon)

It has been established that a number of functional systems are in opposite dependency on the basic rhythm of the leading channels, which is seen in the example of asynchronous activity in the systemic pairs of BL-GB and SP-TE (fig.16). At the same time, we note that the identified issue has a direct relation to the mechanisms of autonomic pathogenesis and will be discussed in the appropriate section.

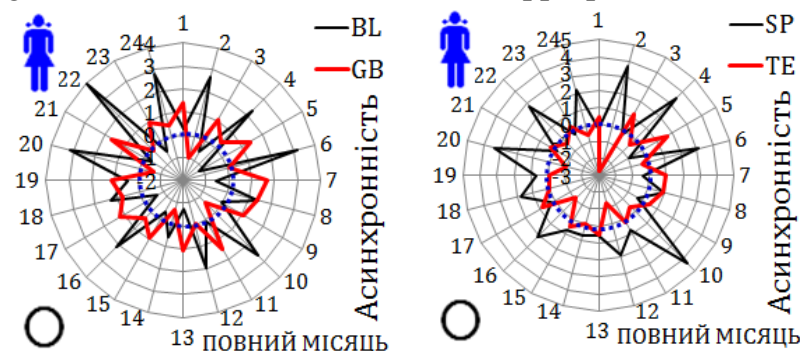


Fig.16 Asynchronous circadian biorhythm of BL-GB and SP-TE (full Moon phase)

Conclusions

1. The traditional rule "BIOLOGICAL CLOCK" has no biophysical support and should not be used in medical and rehabilitation practices.

2. Circadian systemic-functional two-hour biorhythm depends on the Cosmo-physical factors (Moon activity) and forms, according to even and odd hours, the opposite-system activity (excitation - oppression) of the leading systems of the first (BL) and the second (SP) functional complexes. The latter, in the form of synchronous-asynchronous dependency, is aimed at the maintenance of the dynamic sustainability of vegetative homeostasis and the processes of adaptation.

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