

**NEW ANTHROPOLOGICAL RESEARCH ON THE URBAN
POPULATION INHABITING THE CITY OF IAȘI DURING THE
MEDIÉVAL AGE. THE NECROPOLIS OF THE BANU CHURCH
(16th–19th CENTURIES)**

VASILICA-MONICA GROZA^{1,2}, GEORGETA MIU¹ and ANGELA SIMALCSIK¹

¹ *Iași Branch of the Romanian Academy, Department of Anthropology*

² *“Al. I. Cuza” University of Iași, Faculty of Biology*

Corresponding author: moni_ian@yahoo.com; antropologie.iasi@yahoo.com

In this article, the authors present the results of a bioanthropological research conducted upon a small osteological series (67 skeletons) unearthed from the necropolis of the old Banu Church, called at the time “The Falling Asleep of the Virgin Mary” Church. According to the information provided by those in charge of the digging (Stela Cheptea, PhD and C.S.I archaeologist and her collaborators), the necropolis was used from the first half of the 16th century to the beginning of the 19th century. The unearthed osteological material is mostly derived from reinterment tombs and includes 67 skeletons or skeletal remains, of which 18 children (0–14 years: approximately 27%), three adolescents (14–20 years: approximately 4%), two adults, 40 matures (approximately 60%) and four seniles.

The average life span, both for the entire series (0–x years) and by gender (20–x years) is similar to that of the late medieval populations who inhabited the Central Moldavian Plateau.

The analysis of the conformational and morphoscopic biometric features revealed typological elements which indicate a Dinaric-Mediterranean-Alpine background, with rare Nordoid or East-Europoid influences. The Alpine elements give a distinctive mark to this population group.

Key words: necropolis, 16th – 19th centuries, demographic indicators, bio-morphoscopic features.

1. INTRODUCTION

The archaeological diggings conducted on the premises of the current “Banu” Church of Iași within an edifice rehabilitation project (in 2011) brought to light a piece of the old church necropolis.

The old church was dated from 1705 [4], and it was known at the time under the name of “The Falling Asleep of the Virgin Mary” Church or “the paupers church” (the paupers guild used to pray here). According to the documentary sources, during the Cossack invasion of 1650 [4], the wooden church was burnt down and a new majestic Baroque edifice made of stone was built in its stead in 1800 (by the Archbishop Iacob Stamate) – the current Banu Church.

According to the affirmations made by the author of the archaeological diggings, Mrs. Stela Cheptea, PhD (managing director of the Centre for European History and Civilization within the Iasi Branch of the Romanian Academy) at the site of the Banu Church, the altar table of the old church was discovered in the current church porch, which shows that the old church was located rather in the direction of the Yellow Ravine, whereas the current church was built more towards the Lăpuşneanu street (the old Serbian Alley).

As regards the dating of the necropolis, although the archaeological research isn't finished yet, the authors of the diggings (Stela Cheptea, PhD and her collaborators) set it between the first half of the 16th century and the beginning of the 19th century, using as dating materials the coins discovered in some of the tombs (the oldest coin was dated from 1550, whereas the most recent was from 1810).

A feature which defines this necropolis is the reinterment, since there are two sets of tombs.

The bones discovered in the area corresponding to the interior of the current Banu Church and ascribed to the church-goers from the "pauper suburb" were entrusted to the Department of Anthropological Research for a study concerning the morpho-biological structure of a segment of the urban population inhabiting the city of Iasi at that time

2. MATERIALS AND METHOD

The unearthed osteological material we used in the study derives from both numbered and unnumbered tombs; most of the skeletons (based on inventory) probably belonged to reinterment tombs.

The preliminary osteological material preparation for the anthropological study required considerable effort and attention in the skeleton or skeletal remains separation, due to bone intermixture in the tombs, missing bone fragments and precarious state of preservation.

We identified the skeletal remains of 67 subjects; as we previously mentioned, a fraction of these remains were discovered in numbered tombs (18 tombs, most of them individual), but the greatest part come from reinterment tombs.

The osteological series, as previously stated, includes 67 skeletons, of which 18 children (0–14 years), three adolescents (two males and a female), two adults (males), 40 matures (22 males and 18 females) and only four seniles (three males and a female). The actual study of each skeleton was preceded by a process of skeleton washing and dirt removal, then the bone fragments were marked and reconditioned. The following step was the determination of the gender and of the age at death, using to that effect a set of morphoscopic and dimensional features.

For the sex determination we analyzed the common shape of the pelvis, the sacrum degree of curving, the greater sciatic notch degree of opening, the robustness of the long bones, as well as the forehead shape and degree of inclination, the mandible robustness, the teeth shape and size.

In the determination of age at death, we used the criteria recommended by the classic methodology, depending on the different stages of growth (children 0–14 years, adolescents, adults, matures and seniles). In the case of children and adolescents, we took into account: the eruption of the temporary and permanent teeth, the tooth buds stage of development, the long bones epiphyses welding with the associate diaphyses, etc.

Thus, the determination of age at death in the case of subjects under 20 years (children – *infans I*, *infans II* and adolescents – *juvenis*) was based on the methodology suggested by Fazekas and Kosa, Schaefer and collaborators, Ubelaker [10, 15, 19].

In the case of subjects over 20 years (20-x years), the features we analyzed in the postcranial segment were: the facies symphysialis and the sacro-iliac surface transformation degree, the changes in the spongial tissue from the humeral and femoral epiphyses, certain involution phenomena which can be seen in the skeleton, as well as the presence of specific pathological processes which can appear with age. In the cranial segment, we studied the cranial sutures level of obliteration and the tooth abrasion. The determination of the gender and of the age at death for the subjects over 20 years was based on the methods and technics recommended by Brothwell, Mays, Walrath and collaborators [7, 13, 20].

The anthropometric and conformity study of each skeleton was conducted according to the classical methods recommended by Martin and Saller [12] and for the evaluation and classification of the absolute and relative values we used the dimorphic scales provided by the authors Alexeev and Debetz [2].

The individual stature was determined in the first place using the methods suggested by Bach, Breitingger, Manouvrier, Trotter and Gleser [3, 6, 11, 17] and afterwards we calculated an arithmetic mean of the values obtained using the three methods.

In the typological characterization we used the methods and scales of Eickstedt [9].

After establishing the sex and age for each skeleton, we proceeded to the demographical analysis of the population represented by the 67 skeletons, studying the mortality rates by age and by sex and the average lifespan estimated by calculating the life expectancy both at birth (0–x years) and at the age of 20 years (20–x years).

The average life expectancy at birth, associated with the average lifespan, is the most accurate evaluation of the mortality level and it represents the average number of years a person is expected to live from the moment of birth to the age limit [18].

The life expectancy at birth was determined using the mortality tables [1]. Based on the mortality by age and by sex, these tables represent significant demographic models in the evaluation of the probabilities of death (qx) or survival (lx). The mortality table features the life history of a population, which usually begins at birth and ends with the extinction of the last exponent [7].

The mortality tables include several mathematical indices associated with the number of deaths grouped by specific age intervals (half decades), based on which we established in the end the life expectancy for the entire population (0–x years) and for the adult population (20–x years):

– % dx = the number of deceased subjects, by age intervals, and the associated percentage;

– lx = the number of survivors;

– qx = the death probability

– Lx, Tx = mathematical calculations based on the previous indices;

– e°x = the life expectancy

The lx survival rate, established for each age group, is defined as the probability that an individual from the intended group will be still alive at the beginning of the age group [8].

3. RESULTS AND DISCUSSIONS

3.1. DEMOGRAPHIC STRUCTURE

The number of skeletons identified after extremely elaborate operations of separation and restoration, amounts to 67; we determined their age and sex, with the purpose of making further demographic observations.

Table 1 presents the structure by age and by sex for the skeletons discovered on the premises of the Banu Church (2011) pursuant to the edifice reinforcement and rehabilitation works.

Table 1
Repartition on sex and age of the skeletons from the necropolis “Banu”, Iași

Sex	Male		Female		Indeterminable		Total	
	N	%	N	%	N	%	N	%
Infans I (0–7)	-	-	-	-	12	17.91	12	17.91
Infans II (7–14)	-	-	-	-	6	8.96	6	8.96
Juvenis (14–20)	2	3.08	1	1.49	-	-	3	4.48
Adultus (20–30)	2	2.99			-	-	2	2.99
Maturus (30–60)	22	32.84	18	26.87	-	-	40	59.70
Senilis (60–x)	3	4.48	1	1.49	-	-	4	5.97
Total	29	43.28	20	29.85	18	26.87	67	100

Studying the numbers from the above table, we are struck in the first place by the relatively high number of deaths during childhood (0–14 years: 26.87%), which indicates that approximately a quarter of the population died before reaching adolescence. If we add to this the percent of adolescents (14–19 years: 4.48%), we state that over a third of the subjects (31.35%) didn't reach the adult age.

The highest mortality can be seen in the age interval 0–7 years (approximately 18%); a half of the children died in the interval 0–1 years (6 out of 12). We can thus conclude that the juvenile mortality decreased with age.

Approximately 60% of the subjects who reached at least adulthood (20–x years, ca. 69%) died in their prime (approximately 33% males and 27% females) and a mere 6% reached the old age (60–x years); only two deaths were recorded in the adult age.

The analysis of mortality by gender revealed a higher mortality rate in the case of males compared to females (29 men compared to 20 women, with a masculinity index of 1,45); this disparity was observed in all the age groups (juvenile, adult, mature and senile) – Table 1, Fig. 1.

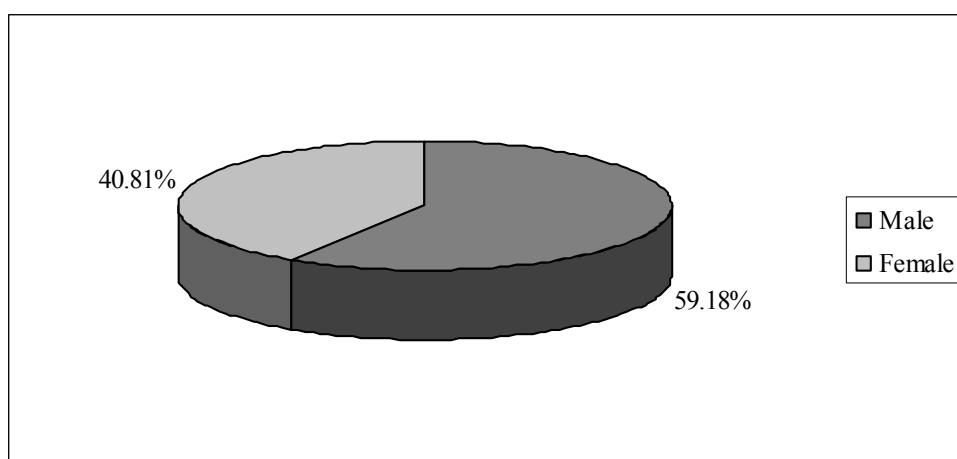


Fig. 1. The percentage repartition of the mortality according to the sex of the specimens in the 20–x years old age segment.

Another demographic indicator of interest in the evaluation of the demographic profile for this group of people is the life expectancy at birth (0–x years) and at the age of 20 years, which is important in the longevity evaluation. Hence, the life expectancy at birth, which corresponds to the average lifespan, is 35.63 years; this value drops significantly (with approximately 2 years) up to the age of 25, whereafter it decreases with five years in the half-decade 25–29 years (to 23.83 years) and with approximately four years in the next five half-decades (Table 2).

The life expectancy at 20–x years by gender (Tables 3 and 4) is approximately four years higher in women compared to men (30.39 years compared to 26.76 years), which indicates an average lifespan of 50.39 years in the former and 46.76 years in the latter.

Table 2
Mortality and life expectancy in the population unearthed from the necropolis
discovered on the premises of the “Banu” Church of Iași (0–x years)

Age class	N(Dx)	%(dx)	Survivors (1x)	Probability of death (qx)	Life expectancy (e^0_x)
0–4	8	11.94	100.00	0.1194	35.63
5–9	6	8.96	88.06	0.1017	35.13
10–14	4	5.97	79.10	0.0755	33.82
15–19	3	4.48	73.13	0.0612	31.38
20–24	1	1.49	68.66	0.0217	28.26
25–29	1	1.49	67.16	0.0222	23.83
30–34	3	4.48	65.67	0.0682	19.32
35–39	5	7.46	61.19	0.1220	15.55
40–44	9	13.43	53.73	0.2500	12.36
45–49	3	4.48	40.30	0.1111	10.65
50–54	12	17.91	35.82	0.5000	6.67
55–59	4	5.97	17.91	0.3333	5.83
60–64	8	11.94	11.94	1.0000	2.50

Table 3
Mortality and life expectancy in the male series (20–x years)

Age class	N(Dx)	%(dx)	Survivors (1x)	Probability of death (qx)	Lx	Tx	Life expectancy (e^0_x)
20–24	1	3.70	100.00	0.0370	490.74	2675.93	26.76
25–29	1	3.70	96.30	0.0385	472.22	2185.19	22.69
30–34	1	3.70	92.59	0.0400	453.70	1712.96	18.50
35–39	3	11.11	88.89	0.1250	416.67	1259.26	14.17
40–44	6	22.22	77.78	0.2857	333.33	842.59	10.83
45–49	3	11.11	55.56	0.2000	250.00	509.26	9.17
50–54	7	25.93	44.44	0.5833	157.41	259.26	5.83
55–59	2	7.41	18.52	0.4000	74.07	101.85	5.50
60–64	3	11.11	11.11	1.0000	27.78	27.78	2.50

Table 4
Mortality and life expectancy in the female series (20–x years)

Age class	N(Dx)	%(dx)	Survivors (1x)	Probability of death (qx)	Lx	Tx	Life expectancy (e^0_x)
20–24	0	0	100.00	0	500.00	3039.47	30.39
25–29	0	0	100.00	0	500.00	2539.47	25.39
30–34	2	10.53	100.00	0.1053	473.68	2039.47	20.39
35–39	2	10.53	89.47	0.1176	421.05	1565.79	17.50
40–44	3	15.79	78.95	0.2000	355.26	1144.74	14.50
45–49	0	0.00	63.16	0	315.79	789.47	12.50
50–54	5	26.32	63.16	0.4167	250.00	473.68	7.50
55–59	2	10.53	36.84	0.2857	157.89	223.68	6.07
60–64	5	26.32	26.32	1.0000	65.79	65.79	2.50

The average lifespan of the group of people inhumed in the necropolis of the Banu Church is fairly close to the values pertaining to other series of people who inhabited the city of Iași during the Medieval Age; it is 1.6 years higher than the average lifespan of the population inhumed in the necropolis of “Sf. Nicolae – Ciurchi” and approximately one year lower than the average lifespan of the group inhumed on the premises of the Catholic Church (Table 5).

Table 5
The average lifespan for specific groups of people

Necropolis	Banu (16 th –19 th centuries)	„Sf. Nicolae-Ciurchi” (16 th –18 th centuries)	Catholic Church „Sf. Maria” (15 th –19 th centuries)
0–x years	35.63	34.06	36.94
Male 20–x years	46.76	43.64	46.81
Female 20–x years	50.39	41.49	45.94

3.2. ANTHROPOLOGICAL DESCRIPTION

a) The neurocranium

The osteological material on the whole is poorly preserved, since most of the skeletons are represented by more or less exploitable bone pieces in the case of a bio-morphoscopic analysis. From the total of 49 skeletons (29 most probably belonging to males and 20 to females), a more detailed study was based on just five skeletons, three males and two females. We specify that 15 skeletons (six males and nine females) are only represented by the postcranial segment, more or less complete and the skull is missing. Under these circumstances, the anthropological study is quite limited and the results obtained for the few skeletons available are strictly orientative in the anthropological characterization of the group.

Table 6 shows the statistical values of the main craniofacial and stature absolute and relative dimensions.

The neurocranium is, on a par, short (g-op: 167.75 mm) and averagely wide (eu-eu: 140.40) in the male group and averagely long (g-op: 177.50 mm) and narrow (eu-eu: 136.75 mm) in the female group; the cephalic index (8/1) is pronouncedly brachycranial in the former (84.90 u.i. – at the upper limit of the category) and moderately mesocranial in the latter (77.16 u.i.). The cephalic index variability is rather limited, oscillating between mesocranial and ultrabrachycranial (the hyperbrachycranial is absent) in males and dolichocranial and brachycranial (incipient) in females (Fig. 2).

The auricular height of the crania (po-po), stated only in four male skulls, has a mean of 111 mm – which can be described as low, with a limited variability

between the very low and middle categories. The ratio between the skull height and length, expressed through the porio-bregmatic longitudinal index has a high value on average, indicating a hypsicranic skull (66.86 u.i. – with a slight tendency towards orthocranic); the tall, hypsicranic shapes prevail (approximately 67%), followed by the orthocranic shapes, which are less represented (Fig. 3).

In relation to the width, the skullcap height is low – tapeino-metricranic (78.92 u.i.). The main category is tapeinocranic (approximately 75%), (Fig. 4).

Table 6

Statistic values of the main, absolute and relative, cephalo-facial and stature dimensions

Martin No.	Character	Male			Female		
		N	M	δ	N	M	δ
1	G-op	4	167.75	9.98	2	177.50	6.36
8	Eu-eu	5	140.40	8.20	2	136.75	6.72
9	Ft-ft	9	97.72	3.48	2	93.00	2.83
10	Co-co	6	119.92	3.56	2	111.75	10.96
12	Ast-ast	5	112.60	2.51	-	-	-
20	Po-b	4	111.00	3.74	-	-	-
45	Zy-zy	3	135.33	11.37	1	115.00	-
47	N-gn	9	109.61	9.11	1	96.00	-
48	N-pr	12	67.38	4.76	3	64.33	6.11
51	Mf-ek	13	39.27	1.91	4	38.63	4.23
52	Height of the orbit	9	35.50	2.28	4	33.63	1.60
54	Al-al	10	23.15	1.36	3	23.33	1.76
55	N-ns	11	49.09	3.63	2	46.75	0.35
63	Enm2-enm2	5	37.70	2.14	1	34.00	-
65	Kdl.-kdl.	7	115.79	6.94	3	133.83	23.75
66	Go-go	11	99.14	5.90	3	95.33	5.13
68	Depth of the mandible	11	69.45	3.95	3	68.33	3.21
69(1)	Height at the g.m. level	19	30.13	3.73	6	25.42	4.62
69(3)	Thickness at the g.m. level	19	11.39	1.17	6	10.50	0.89
8/1	Cranial index	3	84.83	9.22	2	77.16	6.55
20/1	Porio-bregmatic long. index	3	66.88	6.32	-	-	-
20/8	Porio-bregmatic transv. index	4	78.92	1.60	-	-	-
9/10	Frontal-transversal index	6	80.49	2.44	1	91.35	
9/8	Frontal-parietal index	5	68.09	3.36	1	71.96	-
12/8	Parietal-occipital index	4	79.28	2.44	-	-	-
47/45	Total facial index	3	80.71	11.95	-	-	-
48/45	Facial superior index	3	49.84	8.20	1	51.30	
52/51	Orbitary index	9	90.42	4.30	4	87.65	7.97
54/55	Nasal index	9	42.07	15.37	2	51.86	1.88
45/8	Cranial-facial transv. index	3	95.00	3.29	-	-	-
69(3)/69(1)	Mandibular robustness index	19	38.45	6.56	6	42.15	5.99
Stature		27	166.19	5.58	17	157.17	5.72

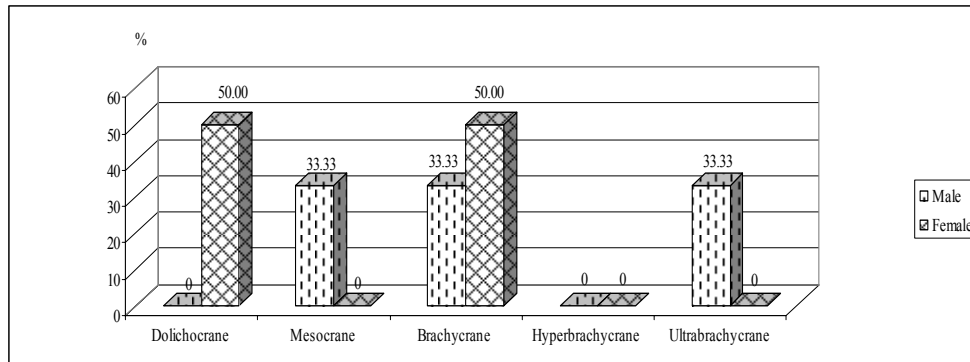


Fig. 2. Cephalic index (8/1).

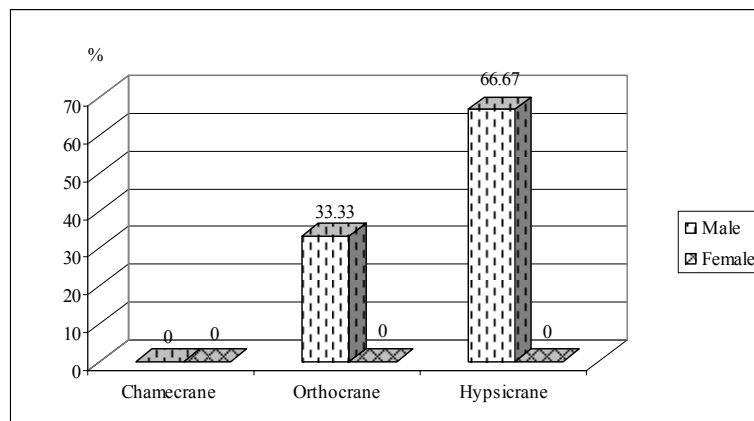


Fig. 3. Porio-bregmatic longitudinal index (20/1).

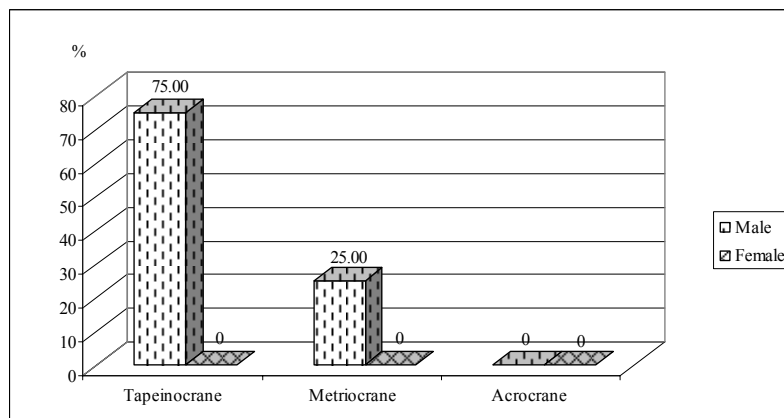


Fig. 4. Porio-bregmatic transversal index (20/8).

The minimal forehead width (ft-ft) is average on a par in both genders (97.72 mm in males and 93.00 mm in females), with a higher variability in males – alternating between the narrow and wide shapes, as opposed to women, where we only encounter medium shapes.

The maximum forehead width (co-co) follows much the same pattern, but the mean values are arranged slightly differently in the average category: at the upper limit we encounter the males (119.92 mm – near to large), whereas the females are situated at the lower limit (111.70 mm).

The frontal transversal index expressing the ratio between the two forehead dimensions is situated in males at the lower limit of the intermediate category, being equally distributed between the intermediate and spherical forehead; this index could be calculated in females based on a single skull and the obtained value is situated at the upper limit of the intermediate category (Fig. 5).

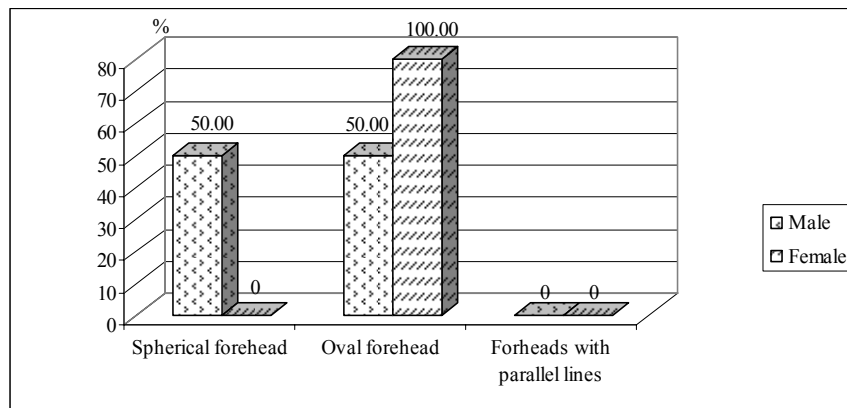


Fig. 5. Frontal transversal index (9/10).

The ratio between the minimal forehead dimension and the neurocranium width, expressed through the fronto-parietal index, records a pronouncedly metriometope mean value in males (68.09 u.i.), indicating an equal distribution of the metriometope and eurymetope categories and an extremely low incidence of the stenometope foreheads (Fig. 6); in the only female skull we could use for a biometric study, the frontal parietal index (ft-ft/eu-eu) indicates a eurymetope forehead (71.96 u.i.).

The average occipital width, stated only in five male skulls, indicates an incipiently wide occipital (112.60 mm); its values fall into the wide (60%) and middle (40%) categories.

The values recorded by the parietal occipital index are on the same lines with the mean dimensional values, being equally divided between the large and mean occipitals; the mean value is situated at the lower limit of the large category (79.28 u.i.), (Fig. 7).

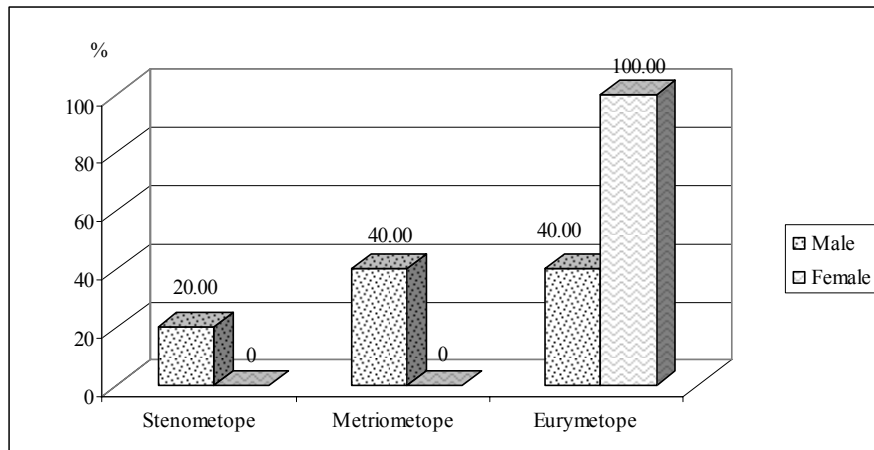


Fig. 6. Frontal-parietal index (9/8).

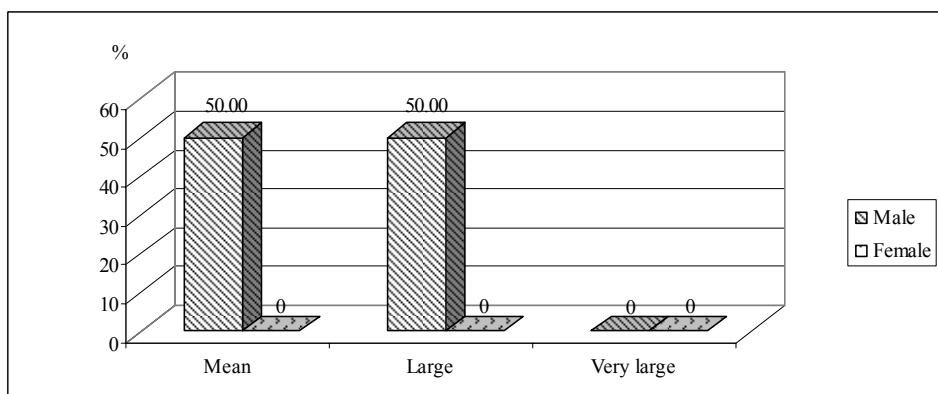


Fig. 7. Parietal - occipital index (12/8).

When viewed from above (in norma verticalis), the shape of the skull is most frequently ovoid (three male skulls and a female skull) and seldom rhomboid (one female skull). If viewed from behind (in norma occipitalis), the neurocranium is exclusively house-shaped (five male skulls and two female skulls). The bone relief, both frontal and occipital, is faintly outlined in general.

b) The facial skull

Considering the facial skulls precarious state of preservation, as well as the absence of certain fragments which rendered impossible the facial reconstruction, the dimensional values were only partially determined based on the available material; we made the most of the biometric and morphoscopic data which could be used in the anthropological analysis.

Thus, the total face height (n-gn) could be determined for nine male skulls and a female skull. The male mean falls under the low category (109.61 mm) on the dimorphic scale. The greatest majority of the values (approximately 67%) belong in the low and very low categories; the facial height of the only female skull can also be described as low.

The superior facial height (n-pr) which was specified for a slightly bigger number of skulls (12 males and 3 females) also records a low male mean (67.38 mm); as regards the individual variability (where the values range from very low to high), the low shapes are encountered in approximately 58% of the cases, whereas the medium values define a smaller number of skulls (approximately 33%). The female mean is situated at the lower limit of the middle category and the individual size values are divided into three different groups: very low, low and high.

The facial width (zy-zy) stated in four skulls (three males and a female) shows a wider variability, ranging from very narrow (a single female skull) to very wide (a male skull).

The mean value for the three male skulls is average (135.33 mm, bordering on large), whereas the individual value for the female skull appears as very small (115.00 mm).

According to the size values, the total facial indices established based on a few male skulls are mostly included in the low categories – suggesting hyper-uryprosopic and euryprosopic faces, with just one case of leptoprosopic face; the average shape is hyperuryprosopic (80.71u.i. – with a tendency towards euryprosopic), (Fig. 8).

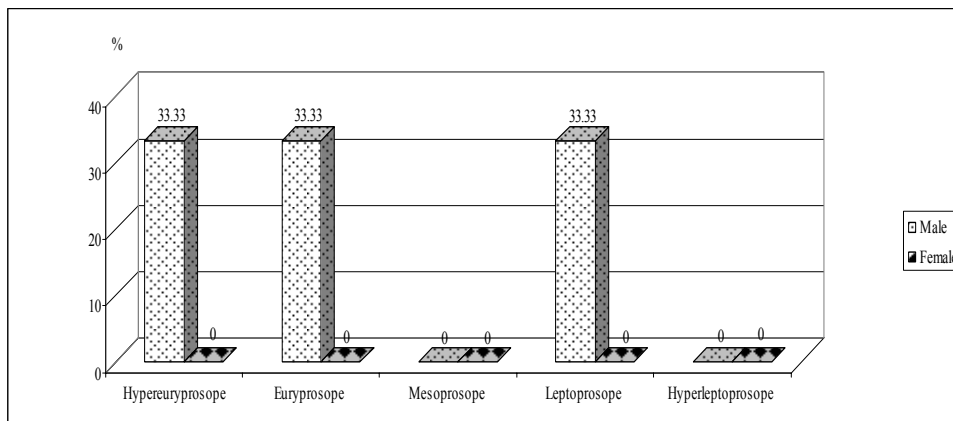


Fig. 8. Total facial index (47/45).

The superior facial index for the three male skulls have values pertaining to three different categories – hypereuryene, mesene, leptene; the mean is situated at the upper limit of the euryene category (49.84 u.i.). The female facial index also suggests a low shape; it is, however, slightly higher than the male mean (51.30 u.i. – towards the lower limit of the middle category), (Fig. 9).

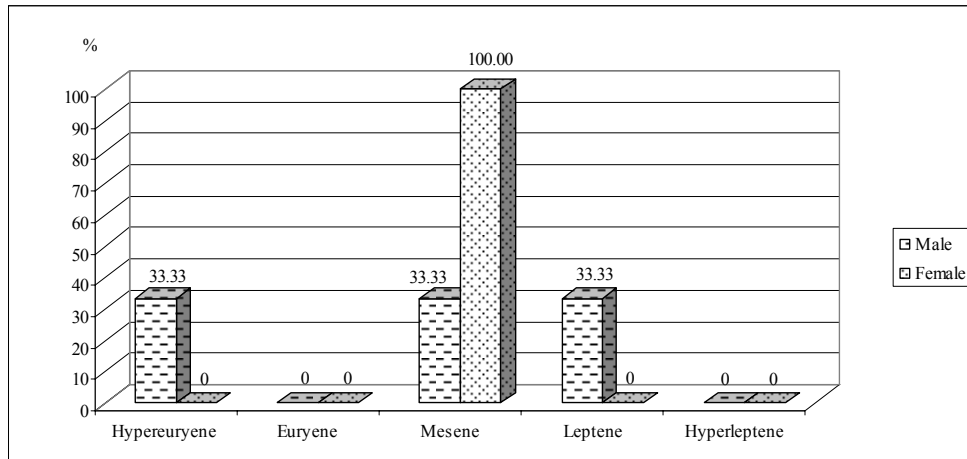


Fig. 9. Superior facial index (48/45).

The orbit height in the male skulls (which amount to nine) ranges from very low to very high, with a mean situated between the middle and tall categories (35.50 mm), which comprise most of the values (44.44%, respectively 33.33%).

The variability is more limited in the female skulls – ranging between low and high values and the mean value is associated with the lower limit of the middle category (33.63 mm).

The mean orbit width (mf-ek) is set at the lower limit of the narrow category (39.27 mm – bordering on very narrow) in men and towards the middle of this category in women (38.63 mm).

Most of the individual values are concentrated in both sexes in the very narrow and narrow categories (approximately 69% in men and 50% in women).

The orbital index allude to high-hypsiconch orbits on average in both genders, but the female mean is approximately 3 u.i. lower than the male mean, indicating a tendency towards lower orbits. The high-hypsiconch orbital indices prevail in men (approximately 78%), whereas in women they have the same incidence as the medium-mesoconch indices (50%), (Fig. 10).

In the calculation of the nose dimensions, respectively of the nasal index, we mainly used the male skulls, since only two of the female skulls were appropriate for this type of analysis. Thus, in both genders, the nose is averagely short (49.09 mm in men and 46.75 mm in women) and narrow (23.15 mm, respectively 23.33 mm). Most of the individual values can be described as low or very low, both in length (approximately 73% in men and 100% in women) and in breadth (approximately 70% in men); medium sizes are mainly encountered in women (approximately 67%), (Fig. 11).

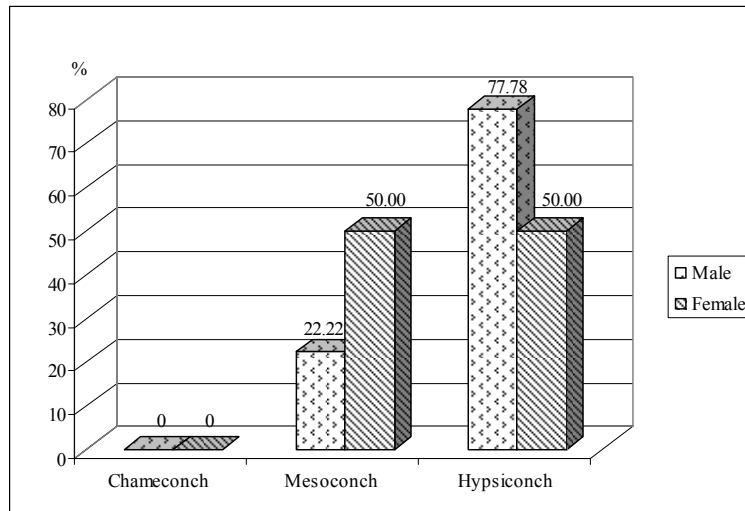


Fig. 10. Orbital index (52/51).

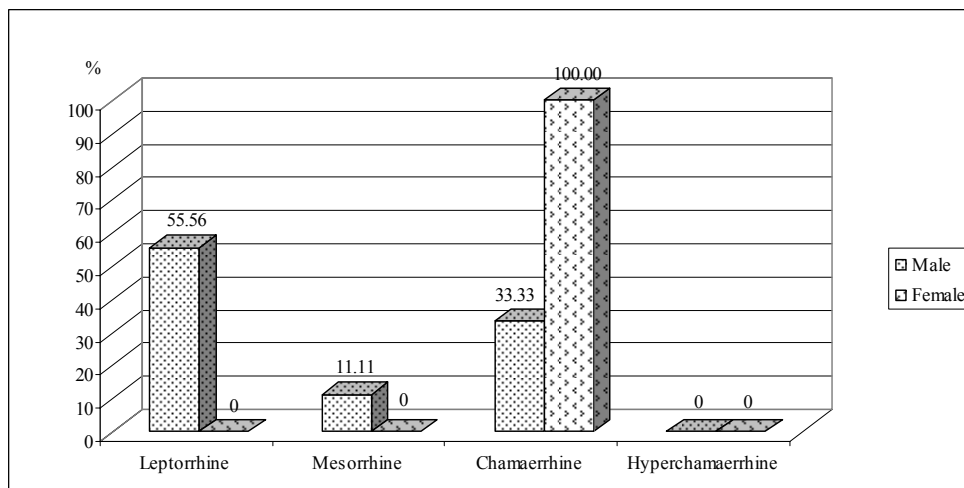


Fig. 11. Nasal index (54/55).

The nasal index have lower values in the male skulls compared to the female ones and their mean is more pronouncedly leptorrhine (42.07 u.i.) in the former as opposed to the latter, where the nose shows a slight tendency towards broader-chamaerhine shapes (mean value = 51,86 u.i.).

The pyriform aperture is anthropine in the majority of cases. The male canine fossae are mostly average (gr. II: approximately 44%) or faintly outlined (gr. I and gr. I-II: approximately 33%) and in few cases deep (gr. III: approximately 22%), whereas in females they are solely faint ((gr. I and gr. I-II: 100%).

The malar bones have a frontal (50%) or intermediate (approximately 36%) arrangement in the male skulls and they are mainly intermediately set in the female skulls (80%).

The mandible appears, on average, slightly more robust in women compared to men, but the mean values of the robusticity index fall under the limits of the same middle category (42.15 u.i. – near the upper limit, respectively 38.45 u.i. – near the lower limit).

The stature was evaluated on a more representative number of cases (Table 6), which might be illustrative of the real values for this biological feature in the analyzed group.

The average stature values indicate sexual differences which are also expressed for that matter by the individual variability. Thus, the mean stature displays lower values in males compared to females; the male mean is set at the upper limit of the middle category (166.19 cm), whereas the female mean belongs in the over-middle category (157.17 cm – close to the lower limit of the category). The middle category with its two subclasses (over-middle and under-middle) concentrates a higher number of male cases as opposed to females (approximately 61% compared to 35%), whereas the tall statures are better illustrated in women (approximately 53% compared to 29%). The short statures have a low incidence and they are equally encountered in both genders (approximately 11% – Fig. 12).

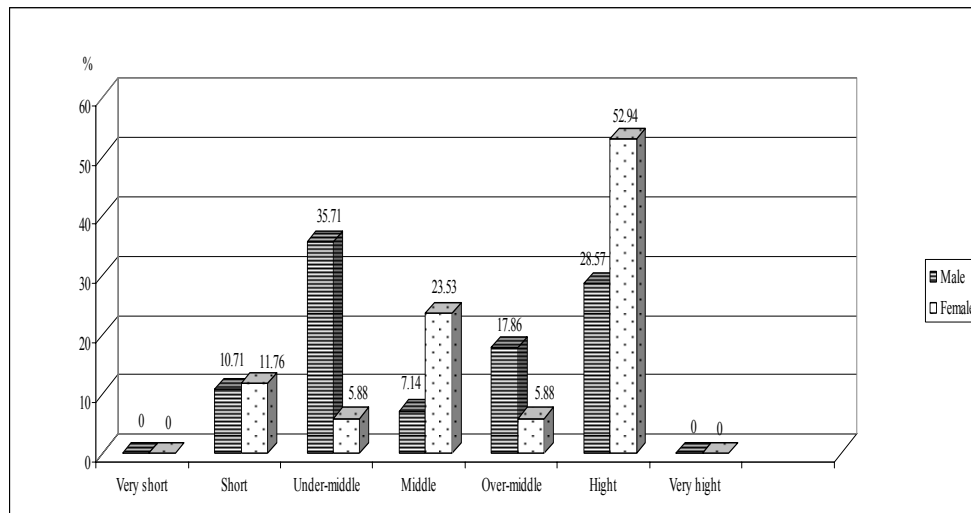


Fig. 12. Stature.

Typological features

Considering that most skeletons are incomplete and represented whether by the neurocranium or by the facial skeleton or just by the postcranial region, the typological diagnosis of each skeleton was determined by the bio-morphological data available.

The study conducted upon the various dimensional features emphasizes an individual typological variability, where the Dinaric, Mediterranean, Alpinoid and occasionally Nordoid or East-Europoid features are encountered in different proportions, defining a certain anthropological type (Dinaric-Mediterranoid, Dinaric-Alpine, Alpinoid, Alpino-Mediterranoid, etc.). Taking into account the weight of the various elements, we can talk about a Dinaric-Mediterranoid-Alpinoid background, in which the Alpinoid element seems to be much better outlined compared to other synchronous series that we analyzed – Ciurchi [16]; Siret [5]; Răchiteni [14].

These Alpinoid elements appear well represented even in the male skeletons; in most of the cases, they are associated with Dinaric features.

The Mediterranean features are also fairly well represented even in male skeletons.

4. CONCLUSIONS

Despite the fact that the study material represents just a fragment of the population inhumed in the Banu Church necropolis, the anthropological study of the skeletons which were more or less complete (skulls lacking the facial massif and cranial pieces or just long bones) will produce important information regarding the anthropological structure which defines a segment of the population inhabiting the city of Iasi during the Medieval Period.

The demographic analysis conducted upon the 67 skeletons indicates relatively high rates of child mortality (0–14 years: approximately 27%), a maximal death rate of the matures (30-60 years: approximately 60%) and a low death rate for the subjects over the age of 60 years. If we consider the mortality by gender, we can see higher rates in the case of men compared to women (43.28%, respectively 29.85%).

The average lifespan (35.60 years) is fairly close to the values defining the late medieval populations studied; analyzed by gender, women seem to live longer than men, as their average lifespan is approximately four years higher (50.40 years as opposed to 46.70 years).

As regards the biomorphological aspect, this series is defined by short and averagely broad skullcaps, which indicate a pronouncedly brachycranic skull in the case of males, whereas women are defined by averagely long and narrow (meso-cranic) skullcaps.

Considering the neurocranium height, the male skulls appear short by metric value, but tall – hypsicranic in relation to the skullcap length (approximately 67%); they are lower in relation to the breadth -tapeino-metricranic (by the mean value); the tapeinocranic shapes prevail.

The forehead is, on average, metriometope and intermediate in males and intermediate-eurymetope in females.

The norma verticalis is mainly ovoid, whereas the norma occipitalis is exclusively house-shaped. The bone relief is generally faintly outlined.

The male face, with a predominantly orthognathic profile, is low – euryprosopic and euryene – on average; however, it has high – hypsiconch orbits and leptorrhine (short and narrow) nose.

The only female skull available displays a relatively taller face, slightly mesene, with high – hypsiconch orbits, just like the males, but the nose is broader – incipiently camerrhine.

The mandible, defined by the robusticity index, appears slightly more robust in women compared to men.

The malar bones have, in most cases, a frontal or intermediate arrangement in the male skulls and they are mainly intermediately set in the female skulls.

As regards the stature, the mean value is higher in the female series than in the male series (17 skeletons); the over-middle and tall statures display a higher incidence in the former compared to the latter (approximately 59% as opposed to 46%).

The typological study (although the number of skeletons which allowed this kind of observations is rather limited) shows most frequently the presence of exclusively Europoid-Dinaric, Mediterranean or Alpinoid elements and seldom Nordoid or East-Europoid features, which leads us to the idea of a Dinaric-Mediterranoid-Alpine background; the Alpine elements are fairly well represented in this group.

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