

Т.М. и др. Распространённость факторов риска неинфекционных заболеваний в Российской популяции в 2012-2013 гг. Результаты исследования ЭССЕ-РФ // Кардиоваскулярная терапия и профилактика. 2014;13(6):4-11. [Muromtseva G.A., Kontsevaya A.V., Konstantinov V.V., Artamonova G.V., Gatagonova T.M. Rasprostranennost faktorov riska neinfektsionnykh zabolevaniy v Rossiyskoy populyatsii v 2012-2013 gg.Rezultaty issledovaniya ESSE-RF// Kardiovaskulyarnaya terapiya i profilaktika.2014.№13 (6).P.4-11] [ru]

2.Алимухамедова Г.А. Особенности клинического течения случайно выявленных образований надпочечников// Международный эндокринологический журнал- 2014-№2(58) –с.47-52. [Alimukhamedova G.A. Osobennosti klinicheskogo techeniya sluchayno vuyavlennykh obrazovaniy nadpochechnikov // Mezhdunarodnyu endokrinilicheskiy zhurnal.2014. №2.P.47-52] [ru]

3.Газимов М.М., Шамитов Ю.П. Диагностика и лечение больных артериальной гипертензией надпочечникового и почечного генеза // Урология – 2014- №3- с.5-7. [Gazimov M.M.,Shamitov Y.P. Diagnostika i lechenie bolnykh arterialnoi gipertenziei nadpochechnikovogo i pochechnogo geneza // Urologiya.2014.№3 p 5-7] [ru]

4.Sapienza P., Cavallaro A. Persistent hypertension after removal of adrenal tumors. Eur.J.Surg 1999; 165:187-192 [en]

5. Fronticelli C., Ferrero A., Quriconi F Primary hyperaldosteronism. Analysis of risk factors associated

with persistent postoperative hypertension. Int.Surg.1995;80(2):175-77.[en]

6.Zhou Y., Zhang M., Ke S., Liu L. Hypertension outcomes of adrenalectomy in patients with primary aldosteronism:a systematic review and meta-analysis // BMC Endocrine Disorders – 2017-Vol.11-p.335-344.[en]

7.Sawka A., Young W., Tompson G. et al. Primary aldosteronism: factors associated with normalization of blood pressure after surgery.//Ann Intern.Med-2001- Vol.135 –p.258-261. [en]

8.Толкачев А.О., Мурадян А.Г., Воробьев Н.В., Костин А.А., Попов С.В. Хирургическое лечение больных опухолями надпочечников // Андрология и генитальная хирургия.- 2016- №17, Т.17.- с.38-43. [Tolkachev A.O., Muradyan A.G., Vorobyev N.V. et al Khirurgicheskoe lechenie bolnykh opukholyami nadpochechnikov Andrologiya I Genitalnaya Khirurgiya -2016-№17,Т.17-p.38-43] [ru].

9.Peppas M., Koliaki C., Raptis S.A. Adrenal incidentalomas and cardiometabolic morbidity:an emerging association with serious clinical implications J. Int.Med. 2010;268:555-566.[en]

10.Пархисенко Ю.А., Цуркан Ю.А., Струкова О.Н., Махортова Г.Г. Отдалённые результаты хирургического лечения опухолей надпочечников // Научно-медицинский вестник Центрального Черноземья 2006; 26:97-103.[ Parkhisenko Yu.A., Tsurcan Yu.A., Strukova O.N., Makhortova G.G .Otdalyennyye rezultaty khirurgicheskogo lecheniya opukholey nadpochechnikov // Nauchno-meditsinskiy vestnik Tsentralnogo Chernozemya. 2006.№26. P. 97-103] [ru].

УДК 614  
ГРНТИ 76.75

---

## АДАПТАЦИЯ ЛИЦ 65 ЛЕТ И СТАРШЕ К ЖИЗНИ В ИНСТИТУЦИОНАЛЬНОЙ СТРУКТУРЕ

---

**Хараланова Г.**

*Кафедра по социальной медицине и организации здравоохранения, Медицинский университет Варна*

**Георгиева Л.**

*Кафедра по социальной медицине и организации здравоохранения, Медицинский университет Варна*

## ADAPTATION OF PERSONS AGED 65 AND OVER TO LIVING IN AN INSTITUTIONAL ENVIRONMENT

**Haralanova G.**

*Department of Social medicine and Healthcare Organizataion, Medical university of Varna*

**Georgieva L.**

*Department of Social medicine and Healthcare Organizataion, Medical university of Varna*

### АННОТАЦИЯ

Смена домашней среды на институциональную - это исключительно сильный стресс для всех, связанный с потерей независимости и, как следствие, психологической идентичности. Настоящее исследование направлено на выяснение того, как проходит адаптация лиц в возрасте 65 лет и старше, а также на решение основных проблем, связанных с этим. Исследование проводилось в два этапа. Первый этап включает 175 человек в возрасте 65 лет и старше, размещенных в домах престарелых (ДСХ) в Болгарии - два в Варне и два в Провадии, при этом одно из учреждений имеет муниципальные

финансирование, а другое - частное. Информация от респондентов была получена посредством полуструктурированного интервью. На втором этапе было проведено качественное исследование, в котором приняли участие 10 человек в возрасте 65 лет и старше, проживающих в доме престарелых в Варне, информация от которых была получена посредством подробного интервью. Результаты исследования показывают, что у большинства людей возникают трудности в первые недели поступления. Они вызваны первоначальным стрессом при изменении условий проживания и включают проблемы, возникающие при общении с другими обитателями и персоналом, усугубление негативных эмоций. Ощущение заброшенности, ненужности вызывает депрессивные симптомы, которые еще больше замедляют адаптацию. Необходимо обеспечить плавный переход в учреждение, выражающийся в бережном отношении персонала к новым жильцам дома, лучшим подборе сожителей в комнате с учетом их индивидуальных особенностей, а также правильном подходе к посещениям, особенно в первые недели пребывания. Комплексный уход, который люди старше 65 лет получают в домах престарелых, имеет первостепенное значение для облегчения решения проблем, связанных с адаптацией при поступлении в учреждение.

#### **SUMMARY**

Changing the home environment with an institutional one is extremely stressful for everyone and is associated with the loss of independence and subsequently of psychological identity. The present study aims to identify the process of adaptation of institutionalized persons aged 65 and over, as well as to address the leading problems related to it. The study was conducted in two stages. The first stage included 175 people aged 65 and over, accommodated in retirement homes for elderly persons (DSH) in Bulgaria – two in the city of Varna and two in the city of Provadia, and in each of the cities two institutions were included – one supported by municipal funding and one supported by private funding. The information from the respondents was obtained through a semi-structured interview. In the second stage, a qualitative study was conducted, which involved 10 people aged 65 and over, accommodated in a retirement home for elderly persons in Varna, from whom information was obtained through an in-depth interview. The results of the study indicate that most people have difficulty in the first weeks of admission. They are caused by the initial stress when changing the living environment and include problems in communicating with other residents and staff, deepening negative emotions. The feeling of abandonment, uselessness causes depressive symptoms, which further slowdown the adaptation. It is necessary to ensure a smooth transition in institutionalization, expressed in a careful attitude of staff to the new occupants of the home, better selection of cohabitants in a room, taking into account their individual characteristics, as well as a proper approach to visits, especially during the first weeks of stay. The complex care that people over 65 receive in retirement homes for elderly persons is of paramount importance when it comes to easier coping with the problems that accompany adaptation after admission to an institution.

**Ключевые слова:** институциональная структура, адаптация, люди 65 лет и старше, трудности, стресс  
**Keywords:** institutional environment, adaptation, people aged 65 and over, difficulties, stress

**Introduction:** Population aging is a global demographic trend that places the care of the population aged 65 and over among the serious health challenges worldwide [8]. The number of people aged 85 and over is growing at a particularly fast rate, with a forecast that by 2034 this age group will make up 5% of the world's population [1]. Changing the home environment to an institutional one is extremely stressful for everyone and is associated with the loss of independence and subsequently of psychological identity [2]. Adaptation to the new way of life is further complicated by the feeling of abandonment and uselessness, the development of depressive symptoms, somatic deterioration and ultimately the lack of desire to live [6]. An elderly person finds it harder to accept the changes in his life. This is mainly due to the established long-term habits in everyday life. The living environment in which he lives gives him peace and security. Any change leads to behavioural problems, even depressive symptoms in many people in later life [9] [10]. Institutionalization is often accompanied by the development of depression, especially in later life [4]. Physical abilities also have a serious impact on the mental state. Improving mobility ensures the independence of elderly people, which also helps to better adapt [12]. Sharing personal space is a serious challenge, especially in the beginning [3]. The

opportunities to make friends in an institutional environment provide easier adaptation to the environment [5]. In such cases, elderly persons socialize quickly and easily [11]. Difficult communication with the staff and with the others accommodated in the institution leads to more difficult adaptation and thus the negative emotions of the newcomers deepen even more.

**Aim:** The aim of this study is to establish how the adaptation of institutionalized persons aged 65 and over is progressing, as well as to examine the leading problems related to it.

**Material and methods:** The study was conducted in two stages. The first stage included 175 people aged 65 and over, accommodated in retirement homes for elderly persons in Bulgaria – two in the city of Varna and two in the city of Provadia, and in each of the cities two institutions were included – one supported by municipal funding and one supported by private funding. The information from the respondents was obtained through a semi-structured interview. Data processing was performed using the IBM SPSS, ver. 19 statistical package, descriptive statistics, cross-tabulation and  $\chi^2$  being applied. In the second stage, a qualitative study was conducted, which involved 10 people aged 65 and over, accommodated in a retirement home for elderly persons in Varna, from whom

information was obtained through an in-depth interview.

**Results and discussion:** The results of the first stage of the study conducted through a semi-structured interview show that in general most people manage to adapt in a relatively short time but there are also such who cannot get used to their new lifestyle at all. The time for which elderly people have adapted to life in the home for elderly persons is presented in Figure 1. The

largest share of respondents (37.7%) have adapted in less than a month, but unfortunately the next largest share of respondents (26.9%) answered that they still do not feel adapted. The obtained results can be explained by the diverse cases of the persons accommodated in social institutions – they have different health status, presence of close people, as well as different frequency of contacts with their relatives.

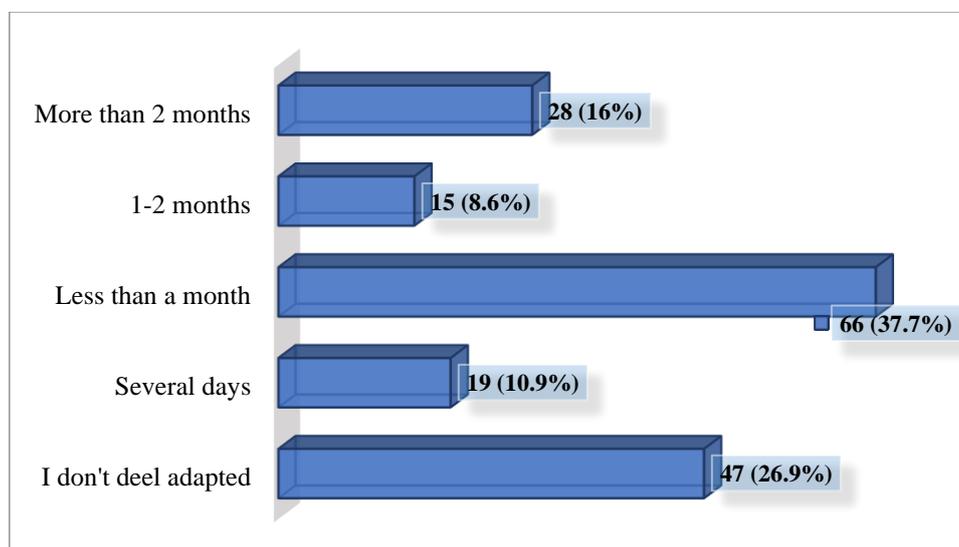


Figure 1. Distribution of the respondents according to the time for adaptation to the life in an institutional environment

As regards people aged 65 and over, the difficulties in adaptation are explained by the changes that occur in the personality, especially in the presence of one or more concomitant diseases (mental or somatic). This is contributed to also by the sharpening of character traits, which intensifies with age, as well as the feelings of fear and helplessness that accompany aging.

There is a number of factors that contribute to the faster adaptation of the subjects (Figure 2). The staff of the institution has the greatest influence. The contact of elderly persons with the staff in retirement homes for elderly persons is crucial for their easier adaptation, as well as for improving their quality of life in the institution.

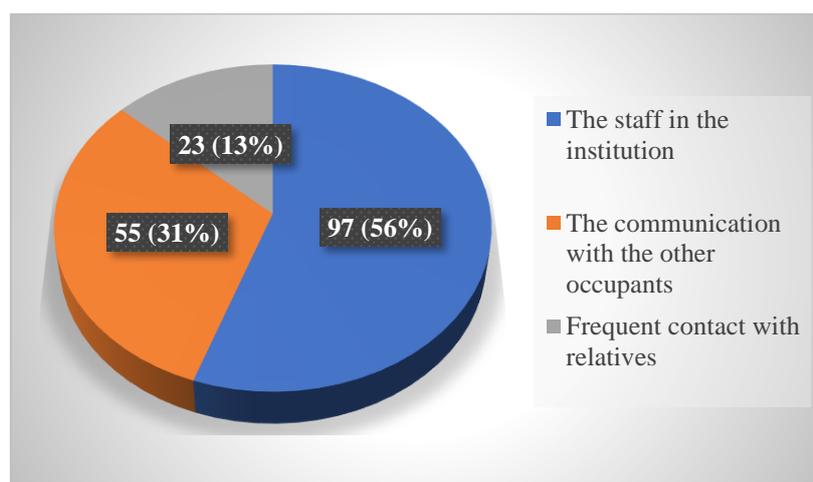


Figure 2. Factors supporting the adaptation to the life in an institutional environment

Nearly half (56%) of those placed in retirement homes for elderly persons believe that the attitude and work of the staff helps them to adapt more easily. In second place (31%) is "communicating with others" accommodated in this home. The least important factor

(13%) indicated by the respondents is "frequent contact with relatives". It is interesting to note the low importance of contact with relatives and friends. Obviously, when placed in a social institution, the new environment is the one that has the most significant

impact on the way of life, as well as its quality for elderly individuals.

Communicating with loved ones, especially in the beginning (first weeks), saddens the respondents and intensifies the feelings of isolation and abandonment

and thus slows down the adaptation (Table 1). The frequency of visits to close people affects the adaptation time of the respondents, as the result is statistically significant ( $\chi^2 = 27.449$ ;  $p = 0.037$ ).

Table 1.

**Comparison of the frequency of visits to the time for adaptation to the life in an institutional environment (n = 175)**

Frequency of visits to the home	Time to adapt to the life in an institutional environment					Total
	I do not feel adopted	Several days	Less than a month	1-2 months	More than two months	
Never	12 (6.9%)	4 (2.3%)	9 (5.1%)	0 (0%)	7 (4%)	32 (18.3%)
Very rarely	11 (6.3%)	3 (1.7%)	20 (11.4%)	9 (5.1%)	11 (6.3%)	54 (30.9%)
Once a month	8 (4.6%)	5 (2.9%)	26 (14.9%)	2 (1.1%)	5 (2.9%)	46 (26.3%)
Once a week	15 (8.6%)	7 (4%)	11 (6.3%)	4 (2.3%)	5 (2.9%)	42 (24%)
Daily	1 (0.6%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.6%)
Total	47 (26.9%)	19 (10.9%)	66 (37.7%)	15 (8.6%)	28 (16%)	175 (100%)

Table 2 presents the time for adaptation according to the age of the respondents. The results show that age

does not significantly affect their time for adaptation in the institution ( $\chi^2 = 26.356$ ;  $p = 0.335$ ).

Table 2.

**Comparison of the age of the respondents to the time for adaptation to the life in an institutional environment (n = 175)**

Age	Time to adapt to the life in an institutional environment					Total
	I do not feel adopted	Several days	Less than a month	1-2 months	More than two months	
65-70	3 (1.7%)	1 (0.6%)	9 (5.1%)	3 (1.7%)	3 (1.7%)	19 (10.9%)
71-75	9 (5.1%)	3 (1.7%)	8 (4.6%)	2 (1.1%)	0 (0%)	22 (12.6%)
76-80	6 (3.4%)	7 (4%)	14 (8%)	2 (1.1%)	7 (4%)	36 (26.6%)
81-85	14 (8%)	3 (1.7%)	18 (10.3%)	3 (1.7%)	10 (5.7%)	48 (27.4%)
86-90	12 (6.9%)	4 (2.3%)	7 (4%)	3 (1.7%)	7 (4%)	33 (18.9%)
91-95	2 (1.1%)	1 (0.6%)	9 (5.1%)	1 (0.6%)	1 (0.6%)	14 (8%)
96-100	1 (0.6%)	0 (0%)	1 (0.6%)	1 (0.6%)	0 (0%)	3 (1.7%)
Total	47 (26.9%)	19 (10.9%)	66 (37.7%)	15 (8.6%)	28 (16%)	175 (100%)

The results of the second phase of the study conducted through an in-depth interview show that the transition to living in an institutional environment is often accompanied by higher levels of stress. The average age of the 10 people included is 83.5 years.  $\pm$  4.32 years. Among those interviewed, six were female and four were male. Based on the data received from the respondents, a qualitative analysis was performed.

Respondents who say they have experienced difficulties report that their difficulties are mainly related to the change in everyday life, as well as meeting new, unknown people with whom they will live in the future. One of the residents (an 84-year-old man) cried during the interview when he recalled the first moments of being placed in the home. There are also respondents with positive impressions of their admission. These are two women, aged 74 and 87, respectively, who believed that retirement homes for elderly persons were a very bad place, but their attitude was not justified. Most interviewees felt stressed in the early days mainly because of the presence of another person in the room they did not know. However, over time, they felt more and more comfortable with company in the room than if they were alone. The conditions in the room are also of great importance for

the quality of life of the respondents. Some of the most important ones are the dimensions of the room, how lighted it is while there is natural light, heating during the cold months, the location of the furniture, the availability of sufficient space for physical activity (if the condition allows). In order to improve the mobility of the persons, it is necessary to provide sufficient space in the room, without overloading with furniture and, if possible, without many steps in the common areas. In this way, the respondents become more confident in their motor skills, which helps them to recover faster in case they suffer a motor disorder.

One of the interviewed men (83 years old) said that he had difficulty in finding friends in the home. Loneliness is an important factor in terms of difficult adaptation. The faster the residents socialize, the easier it is for them to get used to the new conditions. Those who are less mobile or completely immobile among them have serious difficulties in communicating with other people from the home. Communication is disrupted on the one hand due to the inability to move independently and seek contact with other people, and on the other hand due to the more frequent manifestation of depressive symptoms due to immobilization. One of the reasons for the development

of depression in elderly people is the appearance of a stressful event in life, and placement in a social institution is undoubtedly such for most persons aged 65 and over.

Two of the respondents found it more difficult to get used to accommodate themselves to their roommates. One of them (an 84-year-old woman) shares: "It is not easy at all, because you have to adjust to people." She encounters difficulty communicating with the other woman in the room. It took her even a few months to find a common language. Very often, in the institutions, coexistence is required between two or more inhabitants in a common room, which leads to conflicts, especially in the beginning. Differences in character and even in health are a factor for more strained relationships. Respondents share that they had disputes with their roommates over the sharing of common consumables – the use of the bathroom, the TV, as well as because of the noise caused by the other. According to them, differences in established habits such as sleep, eating, watching TV, listening to the radio and others cause misunderstandings. The inability of the staff to cover the care of several people at the same time also leads to aggravation of the relations between the accommodated on the one hand, as well as between them and the staff, on the other. The feeling of rejection by loved ones, which is often experienced by institutionalized adults, adds further negative emotions and also contributes to the arising of conflicts in the institution. One of the interviewees (a man in his 80s) shares that he had a hard time getting used to it at first because the food did not match his taste. He often had a feeling of irritation and discomfort after eating due to the specifics of his condition. Four of the respondents report that they easily adapted to the new environment. For one of the women (88 years old) the main factor for this was the attentive attitude of the staff and the peace of mind that this brought her. During the period of separation from loved ones, it is much more difficult for elderly people to trust someone, especially complete strangers. The role of the staff is extremely important for overcoming the barriers in communication with the residents. When working in institutions, especially with problematic adults (severe somatic lesions, severe cognitive impairment), employees often face a number of difficulties. This further impairs the opportunities for better communication with the residents. The specific needs of retirement homes for elderly persons residents, as well as the sharpening of character traits with age, lead more easily to fatigue in the staff, and in some cases they even develop a burnout syndrome.

Another interviewed woman (74 years of age) shares that her life before her admission did not differ significantly from that in the institution, because her husband took care of her then and she did not leave her home. She says that now her only difficulty is the absence of her husband, and the other aspects of her life are unchanged. She did not share anything about a difficulty in communicating with the other residents of the home, including the woman from the same room, as well as with the staff from the home.

The results of the study show that most people experience difficulties in the first weeks of admission.

They are caused by the initial stress due to a change in the living environment and include problems in communicating with other residents and staff, deepening negative emotions, including feelings of abandonment, uselessness. Such emotions lead to the development of depressive symptoms, which further slows down adaptation. It is necessary to ensure a smooth transition in institutionalization, expressed in a careful attitude on the part of the staff to the new occupants of the home, better selection of cohabitants in a room, taking into account their individual peculiarities, as well as a proper approach to visits, especially during the first weeks of the stay.

**Conclusion:** Based on the results obtained, we can conclude that there are some difficulties in adapting to the life in an institutional environment. They are manifested mainly in communication with other inhabitants due to differences in character, as well as due to previously established habits. Consideration of another person, especially if such other person is a stranger, deepens the stress of entering a social institution. Disputes and conflicts between those accommodated in a common room arise more often. The division of the room, as well as the pertaining consumables, often creates conditions for tension between the cohabitants.

The complex care that people over 65 age received in the retirement homes for elderly persons is of paramount importance when it comes to easier coping with the problems accompanying adaptation after admission to an institution.

*This article is part of a study conducted under Project No.19032 "Socio-medical problems related to the institutionalization of persons aged 65 and over" of the Science Fund at the Medical University "Prof. Dr. Paraskev Stoyanov"-Varna, Bulgaria.*

#### REFERENCES:

1. Alldred DP, Kennedy M., Hughes C. et al. Interventions to optimise prescribing for older people in care homes, Cochrane Database Syst Rev., 2016 Feb 12; 2(2): CD009095
2. Altıntaş E., De Benedetto G. and Gallouj K. Adaptation to nursing home: The role of leisure activities in light of motivation and relatedness. Archives of Gerontology and Geriatrics, 2017 May-June; 70: 8-13
3. Arther L. Materialities in and of institutional care for elderly people. Frontiers in Sociology [Internet], October 2018, 3. [updated 2018, cited 2020]. URL: <https://www.frontiersin.org/article/10.3389/fsoc.2018.00030>.
4. Casarella J. Depression In the Elderly, WebMD Medical Reference, June 2020. URL: <https://www.webmd.com/depression/guide/depression-elderly#1>.
5. Coimbra VDSA., Silva, RMCRA., Joaquim FL., & Pereira ER. Gerontological contributions to the care of elderly people in long-term care facilities. Revista Brasileira de Enfermagem, 2018; 71(2), 912-919

6. Dudevа D, Georgieva L. Sources of stress among residents of social institutions. *Varna Medical Forum*, 2014; 3:126-129

7. Georgieva L. Changes in medical and social care needs with progression of age. *Varna Medical Forum*, 2017; 6:455-460

8. Georgieva L. *Global health*. Varna: MU-Varna: STENO, 2018

9. Georgieva L. Health and role functioning in advanced age, 2017; 6:15-20

10. Haralanova G., Georgieva L. Life before entering a home for the elderly as a reason for institutionalization, *Knowledge International Journal*, 2020; Vol. 42(4):797-801

11. Haralanova G., Georgieva L., Kostadinova T. Problems in the socialization of persons aged 65 and over using social institutional services, *Management and Education*, 2020; 16 (5), 27-30

12. McPhee J. S., French D. P., Jackson D., Nazroo J., Pendleton N., & Degens H. Physical activity in older age: perspectives for healthy ageing and frailty. *Biogerontology*, 2016; 17, 567-580

#### Адрес переписки:

**Ас. д-р Галина Атанасова Хараланова**

Аспирант Департамент социальной медицины и организации здравоохранения  
Медицинский университет – Варна  
ул. "Марин Дринов" №55  
гр. Варна 9002

**Проф. д-р Лора Христова Георгиева, д.м.**

Департамент социальной медицины и организации здравоохранения  
Медицинский университет – Варна  
ул. "Марин Дринов" №55  
гр. Варна 9002

### TREATMENT OF OVARIAN ENDOMETRIOMA ACCORDING TO THE CLINICAL STAGE

DOI: 10.31618/ESU.2413-9335.2020.2.80.1106

*Munkhbayar Choijiljav*<sup>1</sup>, *Amarjargal Olzvoi*<sup>2</sup>,  
*Munkhbayarlakh Sonomjamts*<sup>3</sup>, *Yanjinsuren Darmaa*<sup>4</sup>

<sup>1</sup>Department of Gynecology,

National Center for Maternal and Child Health, Ulaanbaatar, Mongolia;

<sup>2</sup>Department of Research,

National Center for Maternal and Child Health, Ulaanbaatar, Mongolia;

<sup>3</sup>Department of Pulmonology and Allergology, School of Medicine,  
Mongolian National University of Medical Sciences, Ulaanbaatar, Mongolia;

<sup>4</sup>Department of Obstetrics and Gynecology, School of Medicine,  
Mongolian National University of Medical Sciences, Ulaanbaatar, Mongolia

### ӨНДГӨВЧНИЙ ЭНДОМЕТРИОМЫН ЭМНЭЛЗҮЙН ҮЕ ШАТЫГ ТОГТООЖ ЭМЧИЛСЭН НЬ

*Мөнхбаяр Ч.*<sup>1</sup>, *Амаржаргал О.*<sup>1</sup>,  
*Мөнхбаярлах С.*<sup>2</sup>, *Янжинсүрэн Д.*<sup>2</sup>.

<sup>1</sup>Эх хүүхдийн эрүүл мэндийн үндэсний төв

<sup>2</sup>Анагаахын шинжлэх ухааны үндэсний их сургууль

#### Background

Endometriosis is a chronic disease in which the glandular and connective tissues in the lining of the uterus migrate to tissues and organs other than the uterus, causing inflammatory infiltration and adhesions in the area, leading to chronic pelvic pain, infertility and disability to work. The aim of this study is diagnosing and treating ovarian endometrioma depending on its clinical stage and conducting a comparative study of the treatment results.

#### Materials and method

129 women aged 20-45 years were included in the study whom ovarian endometriosis diagnosed in the gynecology department of the Obstetrics and Gynecology Hospital, National Center for Maternal and Child Health, in 2018-2019. A prospective hospital-based clinical case-control study was conducted.

#### Results

The average age of women was  $31.6 \pm 6.8$ . Clinical symptoms: 126 (97.7%) women with endometriosis experienced pain during menstruation, 106 (82.2%) experienced pain during intercourse, 117

(90.6%) experienced lower abdominal pain for over 6 months, and 48 (37.2%) experienced pain during urination, 76 (58.9%) had pain during defecation, 123 (95.3%) had recurrent abdominal pain, and most women had an overlap of 3-4 symptoms. A comparative study was performed between 2 groups of whether women received and did not receive progestin before surgery. The women (group 4) who received progestin blood loss was up to 100ml ( $p=0.002$ ) during laparoscopic surgery, and the number of stationary follicles after surgery were 2 and above ( $p=0.021$ ). There were a little trouble to remove endometrioma for 23 (74.2%) of the women in group 4 ( $p=0.05$ ) during surgery. However, 14 (43.8%) women in group 3 had difficulty having their endometrioma removed. This shows a statistically significant difference.

#### Conclusion

1. Clinically, ultrasound diagnosis is a non-invasive type of diagnostic method of the ovarian endometriosis and its stages (average score 30). However, a laparoscopy is more effective in determining the stages of endometriosis infiltrating the ovarian surface, intestinal wall, posterior fossa,