Short Research Article

For and against iris diagnostics - the ophthalmologist's opinion

ABSTRACT

Introduction - Iridologists use iris diagrams, dividing the iris of the eye into 12 hours. Bulgaria also has a tradition of studying the iris, for example Peter Dimkov and his work "Ocular Diagnosis. A Practical Guide". However, according to most reputable international publications, "Iridology is not supported by any published studies and is considered a pseudoscience to most physicians."

Aim- To study the awareness of the population and the opinion of medical professionals on the issue of iris diagnostics in Bulgaria.

Materials and Methods – it's a survey design, conducted at Eye Clinic "St. Nikolay", over a period of 3 months: May - July 2023.

Results- A total of 300 participants were surveyed, including 123 medical professionals. The female respondents were more - 81.5%, with the active population aged 20-60 years - about 90%. Most respondents- 68.1% don't know where such examinations are performed. The majority don't even know by who they are done: respectively 41.6% think they are done by eye doctors, and 24.2% they have no opinion. Almost 77.9% of respondents don't know specialists in iris diagnostics, but 57.2% would do such a consultation and would even pay a not small amount of money for it – 50BGN. Nearly 42.3% of the respondents would trust the method. Until the time of the survey only 13% had attended such an examination.

Conclusion - The eye is a window to our health. Although iridology has its appeal, evidence-based medicine does not support the use of iridology in practice. Iris diagnostics is simply a way of possibly identifying a possible health problem.

Key words -eye disease, iridology, iris map, ophthalmologist

Introduction

The foundations of iris diagnostics were laid by Philippi Meyers in 1670. The Viennese ophthalmologist Georg Joseph Beer (1) was not familiar with his views on iris analysis, but in 1813 he wrote in his publication, "Everything that affects the organism of the individual cannot be without an effect on the eye, and vice versa." The discipline was further developed by Ignaz von Peczely in 1881 and by Nils Liliequist in 1890. The story of Peczely, who found an owl with a broken leg and noticed a prominent black stripe in the iris of one of the owl's eyes, has gained wide popularity (2). After the bird healed, he noticed that the black line had disappeared, replaced by sparse white lines. Iridology is considered an alternative medicine in which the patterns, colors, and other characteristics of the iris are examined to gather information about the patient's general health condition. Iridologists use iris charts, dividing the iris of the eye into 12 hours and seven circles that start at the pupil and go outwards. The iris is divided into 60 different zones, each representing a different part of the body. This is called the "map" or iris diagram of the right and left eye. (Fig. 1).

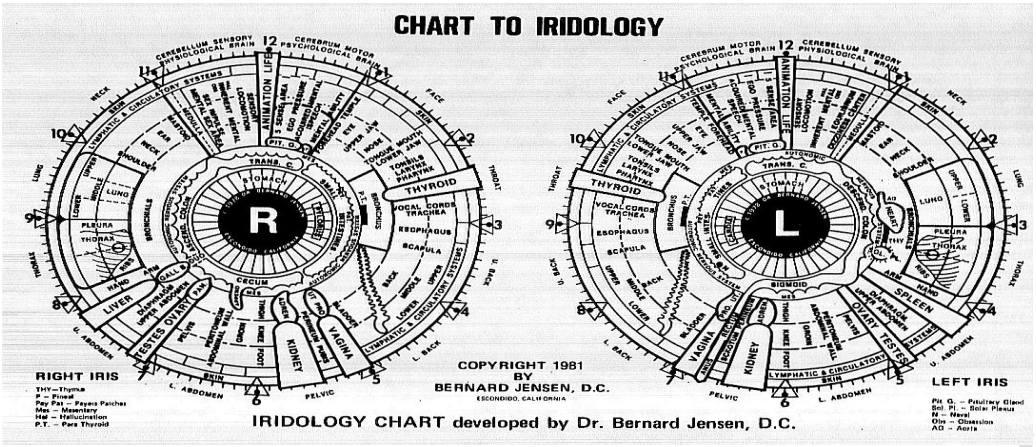


Fig.1. Iris diagram of right eye and left eye.

Bernard Jensen (1908-2001), a pioneer in iridology in the United States, developed one of the most detailed iris charts in the 1950s. However, it is not a method of treatment, but a diagnostic tool for assessing a patient's general condition.
Bulgaria also has a tradition in the study of the iris and its diagnostics. Here we should mention Peter Dimkov (3) with his work "Ocular Diagnosis. A practical guide", as well as "Iris Diagnosis-Possibilities and limits. Iridogenotypes in medical practice" by Dr. Andrey Petrov (4), "Classical Iris Diagnosis. Holistic Medicine" by dr. Dimitar Dzhupanov (5), as well as the translated literature available "Iris Diagnostics" (6) by M. Madaus. In our country, mainly magnifying glass is used in the examination, as well as iridoscope - a special camera with a built-in software, almost no iris is analyzed on a slit lamp (biomicroscope).
According to most authoritative publications (7) "Iridology is not supported by any published studies and is considered a pseudoscience by most doctors." All this led us to look into the topic among Bulgarian patients and medical professionals.

Aim- To study the awareness of the population and the opinion of medical professionals on the issue of iris diagnostics in Bulgaria.

Materials and Methods –the survey is conducted at Eye Clinic “St. Nikolay” - Varna and Burgas. Data from a total of 300 respondents were processed for a period of 3 months: May-July 2023. A specially designed questionnaire was used by applying the direct survey method. It was conducted under standard conditions, including 14 questions, all of them close ended – some of them with yes or no answers. The obtained results were processed using Microsoft Excel 2013 software.

Results - About 300 participants were surveyed, including 123 medical professionals. Not all of the patients answered all of the questions. There were some incomplete responses, the number of which is reflected for each question. There were more female respondents, 81.5%, while the male respondents were 18.5% . The age distribution is given in Fig. 2, with the active population aged 20-60 years predominating - about 90% in total.

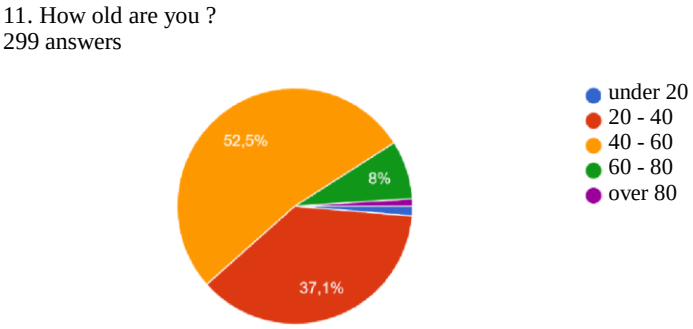


Fig. 2. Responses to question 11- age distribution

Out of all participants 17.4% are with secondary education, respectively with higher education are 244 out of 299 respondents. A very high percentage of respondents know what iris diagnosis is - 73.3%, most of them are health professionals. The topic is interesting for most of the respondents in 82.2%, but 11.4% (34 people) think that it is not a serious medical activity. Of them, 20 are medically trained. Most respondents 68.1% do not know where such examinations are performed. The majority do not even know by whom they are done: respectively, 41.6% think they are done by eye doctors, 34.2% think the opposite, and the remaining 24.2% have no opinion.

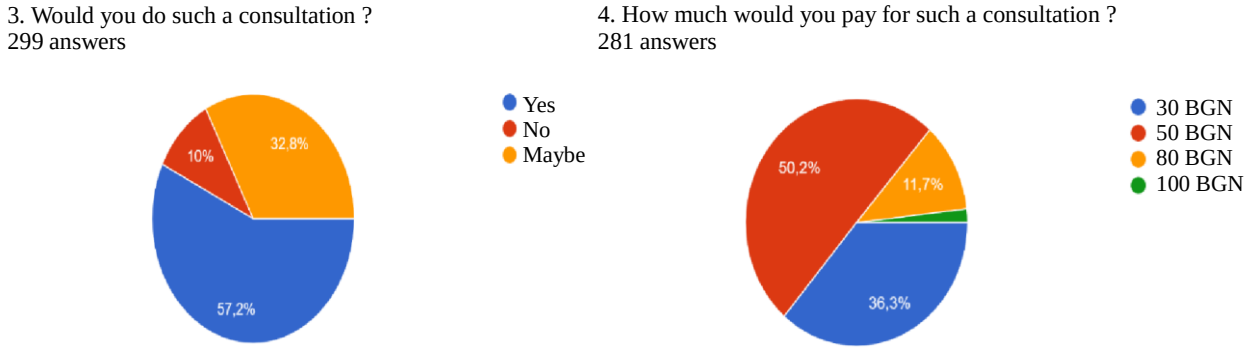


Fig. 3. Answers to question 3 and question 4

Almost 77.9% of the respondents do not know specialists in iris diagnostics, but 57.2% would do such a consultation. Half of the respondents would even pay not a small amount of money for it - 50 BGN. These are basic questions of the survey structure.

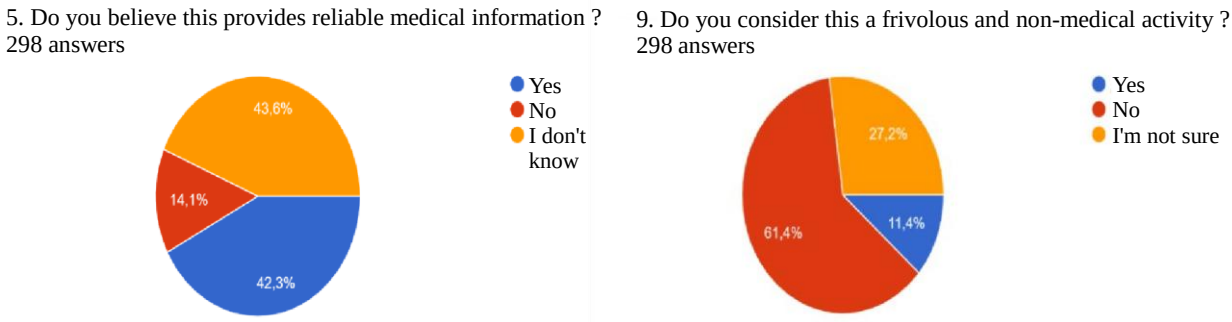


Fig. 4. Answers to question 5 and question 9

Question 5, asking about the reliability of iris diagnostics, is also a basic question, and question 9 is considered a control question, checking whether the attitude on the subject matches. Nearly 42.3% of the respondents would trust the method, with an even higher percentage of 61.4% not considering it a frivolous activity (Figure 4). However, only 13% had attended such an examination up to the time of the survey.

Discussion –

In our survey we found that: there is an unclear knowledge of the subject, a lack of clarity about who and where the consultation is provided by, such reviews are not often done, but there is a strong interest and willingness to pay for this service.

Bernard Jensen (8) againsays about the anatomy and physiology of the eye, that: "nature has provided us with a miniature television screen, showing the most distant parts of the body by nerve reflex responses". By the structure and function of the iris, of course, much medical data can be interpreted. It remains constant throughout life unless it becomes altered by trauma or surgery. This feature is used in the modern world, like fingerprints, for identification, as a substitute for personal data. In the past, good clinicians and diagnosticians made unmistakable diagnoses after examining the external scars of the body and the organs. For example, in paediatrics and infectious diseases, a very common method is the mandatory examination of the tongue, which leads us unmistakably to the identification of conditions and diagnoses.

However, this does not elevate the study of the tongue, for example, to the science of 'glossology', as the role given to the study of the iris does.

Purely anatomically from the condition of all structures of the eye, not only the iris, we judge about the presence of many diseases of the organism as a whole. The examples are many, but the most prominent of them are:

1.Arcus senilis: a gray-white ring around the edge of the cornea indicating excessive cholesterol and arteriosclerosis.

2.Yellowing of the sclera is a sign of diseases of the gallbladder and bile ducts.

3.In thyroid diseases, the eyes have a whole range of symptoms: lagophthalmos, infrequent blinking (*Stellwag's symptom*), upper eyelid delay when looking down (*Graefe's symptom*), convergence insufficiency (*Mobius' symptom*), eyelid hyperpigmentation (*Elinek's symptom*), diplopia, etc.

4.Iris nevi are pigment accumulations and are usually harmless. The melanoma of the eye is extremely rare but can develop in 2% of people with iris nevus.

5.Iris nodules are associated with various types of uveitis. They can develop in people with metastatic infection, sarcoidosis, Vogt-Koyanagi-Harada syndrome, multiple sclerosis, rheumatological diseases, etc.

6.Rubeosis iridis is a condition in which new blood vessels develop on the iris, usually in diseases such as diabetes and retinal vessel occlusion.

7.The deposits on the cornea also indicate many diseases, e.g. Kaiser's Flasher ring of copper deposits. It occurs in Wilson's disease, which is characterized by impaired processing of copper by the liver. *Hudson's line is* characterized by iron deposition that is asymptomatic, cordarone keratopathy (cornea verticilata) due to amiodarone deposition, Kruckenberg's spindle represents a vertical spindle-shaped area due to increased melanin pigmentation, etc.

8.Changes in the size and function of the pupils are also a serious neurological sign - e.g. the triad "ptosis-myosis-enophthalmos" - in Claude-Bernard-Horner syndrome. Absent pupillary reflexes, or pathological ones suggest the use of certain medications, anesthesia, tumors, trauma, etc.

The ocular manifestations and symptoms of a number of rare syndromes, diseases and abnormalities are described in detail in the monograph of assoc.prof. Koev (9), which provides a broad interdisciplinary approach to the diagnosis of rare diseases with an

emphasis on the eye. Due to surgical interventions and trauma to the eye itself, the iris can be significantly damaged, compromising the possibility of any iris diagnostics at all. These are a few of the features of the eye, which as an external organ can "predict" some diseases and conditions of the human organism. That is why for a good ophthalmologist, can figuratively say is also a good "iridologist". Knowing well enough the eye diseases he can recognize many common pathologies of the organism.

However, there are many publications that reject the seriousness of iris diagnostics. In 2000, Dr. Edzard Ernst (7) published a thorough analysis of the publications about iris diagnostics so far. It was found that none of the "positive" studies had a proper implementation design. In 1985, in the Scandinavian ophthalmological journal Acta Ophthalmologica, Bergren (10) concluded that, "Good patient care is incompatible with fraudulent methods and iridology must be regarded as medical fraud." Many concurrent consultations between two or more iridology specialists have been made in which the diagnoses already established are not confirmed (11). In a study in 2005 (12) out of 68 patients with proven heterogeneous cancer, only 3 cases had the diagnosis confirmed by iris diagnostics. It can be concluded that just as false positive diagnoses can worry patients and cause harm, false negative diagnoses are very dangerous because significant complaints and diagnoses can be neglected or missed. If in previous decades, when medicine did not have modern high-tech devices and examinations, iris diagnostics could be even theoretically admitted and used, today with the availability of artificial intelligence, relying on these findings is too frivolous, even dangerous. In countries, usually in the former Eastern bloc, where the organization and level of medical culture and prevention are not high, such holistic methods of diagnosis and treatment have a wide field for development. However, in our country there is no established system for training and qualification of such personnel, as, for example, in China, Russia and even the USA. (13). The available 'specialists' in iridology are very few in number.

Conclusion

After the literature review and analysis of the survey results, we can draw some conclusions: women are always more likely to participate in surveys as well as alternative medical examinations and manipulations. The organization of medical activity in Bulgaria makes it possible to carry out this activity (iris diagnostics), although most patients have not used it, do not know by who and where it is practiced, but would carry out a consultation for which they would even pay.

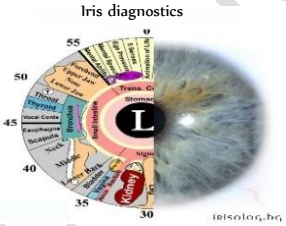
The eye is a window to our health. Ophthalmologists, as the only ones enlightened in the mysteries of the eye, would benefit the most by combining knowledge and experience in diagnosing some systemic diseases. Although iridology has its appeal, evidence-based medicine does not support the use of iridology in practice. Keep in mind that iris diagnostics is simply a way of possibly identifying a possible health problem.

References

1. David J. Pesek, Ph.D. DHC. Holistic Iridology® Health Assessment through External Ophthalmic Examination. https://www.holisticiridology.com/
2. Wikipedia - Iris diagnostics - Available from:https://bg.wikipedia.org/wiki/
3. Dimkov Peter, "Ocular Diagnosis. Practical guide-1999. Astral ISN 2512258972940
4. Petrov Andrey, "Iris Diagnostics-Possibilities and Limits. Iridogenotypes in medical practice". 1995., edition: Iris-Sofia
5. Dimitar Dzhupanov, "Classical Iris Diagnostics. Holistic Medicine" 2012. ed. Mirror - Sofia
6. Madaus M, "Iris Diagnostics" 1993,edition: Orbel-Sofia
7. Ernst E. Iridology: Not useful and potentially harmful. Arch Ophthalmol (Chicago, Ill 1960);118(1):120-1. Available from: https://pubmed.ncbi.nlm.nih.gov/10636425/

8. Iridology: A Society for Science-Based Medicine Fact Sheet, Available from: http://www.sfsbm.org/
9. Koev Krasimir, "Contemporary aspects of some rare syndromes, diseases and anomalies affecting the eyes", 2017 –edition: "Steno"- Varna
10. Berggren L. Iridology. Acta Ophthalmol 1985 Feb 1;63(1):1-8. Available from: https://onlinelibrary.wiley.com/doi/full/10.1111/j.1755-3768.1985.tb05205.x
11. Cockburn DM. A Study of the Validity of Iris Diagnosis. Aust J Optom 1981 Jul 1;64(4):154-7. Available from: https://onlinelibrary.wiley.com/doi/full/10.1111/j.14440938.1981.tb02989.x
12. Münstedt K, El-Safadi S, Brück F, Zygmunt M, Hackethal A, Tinneberg HR. Can iridology detect susceptibility to cancer? A prospective case-controlled study. J Altern Complement Med. 2005 Jun;11(3):515-9. Available from: https://pubmed.ncbi.nlm.nih.gov/15992238/
13. International College of Iridology - Working to bring together iridologists from around the world, ICI promotes the unification of iridology practitioners and a common arena for sharing, discussing, and presenting the latest discoveries in the field. Available from: https://iridologycollege.org/

Appendix 1



SURVEY

1 . Do you know what is iris diagnostics ?
a/ YES b/ NO
2. Have you attended such an examination?
a/ YES b/ NO
3. Would you do such a consultation ?
a/ YES b/ NO
4. What price would you pay for such a review? a/ BGN 30 b/ BGN 50 c/ BGN 80 d/ BGN 100.
5. Do you believe this gives reliable medical information ?
a/ YES b/ NO
6. Do you know where such examinations are performed?
a/ YES b/ NO
7. Do you know specialists in iris diagnostics?
a/ YES b/ NO
8. In your opinion, is the consultation done by eye doctors?
a/ YES b/ NO
9. Do you consider this a frivolous and non-medical activity?
a/ YES b/ NO
10.You are?
a/ a man b/ a woman
11. How old are you?

a/ under 20 years old b/ 20-40 c/ 40-60 d/ 60-80 e/ over 80 years old

12. What is your education? a/ primary b/ secondary c/ higher

13. Is the topic of iris diagnostics interesting for you?

a/ YES b/ NO