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PRACTICING UNCONVENTIONAL MEDICINE IN THE FACE OF THE COVID-19 PANDEMIC ON THE FACEBOOK GROUP “HOMEOPATHY POLAND – CLASSICAL, CLINICAL, DETOXIFICATION”²

Abstract

According to an international study³, alternative medicine has grown significantly in popularity over the past 30 years in most Western countries. The Covid-19 pandemic and the realities associated with it have meant that the use of non-medical practices has increased significantly. The timing of the Covid-19 pandemic compounded people’s negative experiences of operating in a risk society. In order to reduce these fears, more and more people are turning to alternative medicine. This is because people are increasingly starting to look for medicines and preventive measures on their own, with the emotional aspects of the perception of the pandemic and the increasing mediatisation being important here, but also the poor state of healthcare in Poland. The text is an analysis of the results of a study conducted on the Facebook group ‘Homeopathy Poland - classical, clinical. Detoxification’. The group is a closed one, where every member must be involved in order to participate. This makes it possible to analyse a group of people using non-medical practices and not

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2 This work is supported by National Science Centre (Poland) grant nr 2019/34/H/HS1/00654. The research leading to these results has received funding from the Norwegian Financial Mechanism 2014-2021 (Project number 2/34/H/HS1/00654).

3 Erlend L. Fjær, Erling R. Landet, Courtney L. McNamara, Terje A. Eikemo „The use of complementary and alternative medicine (CAM) in Europe”, BMC Complement Med Therapies, Vol.108, 2020. <https://doi.org/10.1186/s12906-020-02903-w>

just declaring these activities. This article attempts to analyse the phenomenon of unconventional medicine and its social consequences using the example of homeopathy. An additional very important factor, the correlation of which we decided to investigate, is the level of belief and magical practices of homeopathy users.

Keywords: *alternative medicine; homeopathy; social media; Covid-19*

Introduction

Non-medical practice is a field that, in the face of a pandemic Covid-19, limited access to a doctor has become far more common. Among researchers, the Covid-19 pandemic is seen as the rise of the perfect storm, meaning a particularly dangerous situation, resulting from the impact of a large number of negative and unpredictable factors⁴. Danuta Pękala-Gawęcka argues that the pandemic has raised fears about expected negative economic and social impacts and other unpredictable consequences. These fears are reinforced by the general unpreparedness for such an event, the nature of the virus itself not yet sufficiently known by scientists. The current situation contributes, on the one hand, to the growing importance of the expertise of scientists⁵. On the other hand, however, uncertainty and fear, often lead to attempts to find simple explanations and ways of dealing with the epidemic⁶. In addition, the period of the Covid-19 pandemic compounded people's negative experiences of operating within a risk society. In order to reduce these fears, more and more people are turning to alternative medicine. This is because people are increasingly starting to look for medicines and preventive measures on their own, with the emotional aspects of the perception of the pandemic and the increasing mediatisation being important here, but also the poor state of health care in Poland. Self-medication uses available pharmaceuticals, remedies specific to different parts of the world, as well as natural preparations, information about which spreads mainly through social media. Internationally, this has led to a surge in the demand and supply of many complementary and alternative medicines and practices (CAM)⁷. Recent studies have shown increasing re-

4 Sabrina Brown, Donna L. Schuman, "Suicide in the Time of COVID-19: A Perfect Storm", *The Journal of Rural Health*, Vol.37(1), 2021, 211-214. <https://doi.org/10.1111/jrh.12458>.

5 Danuta Pękala-Gawęcka, „COVID-19, niepewność, lęk i nadzieja. W poszukiwaniu skutecznego leku”, *Lud*, vol.140, 2020, 185-212.

6 Dusanka Slijepcevic, "Zygmunt Bauman's contribution to the discourse on a risk society", *СОЦИОЛОШКИ ДИСКУРС*, Vol.7., 2018, 79-106, DOI:10.7251/SOCEN1713079S.

7 Vibhu Paudyal, Shusen Sun, Rabia Hussain, Mohammed H. Abutaleb, Eric W. Hedima, "Com-

quests for CAM information from pharmacists and other health professionals from members of the public and patients for prevention, symptom relief or treatment of COVID-19. CAM is understood as a set of practices that are not fully integrated into the dominant health care system and includes herbal treatment, yoga and relaxation techniques⁸.

Interest in the behavioural situation of individuals in the event of an illness crisis has long been present in sociology. The origins of the sociology of medicine date back to the 1950s. Following Robert Strauss, the sociology of medicine is in a way a sociology about medicine, which includes the organisational structure, systems and values, role relations, rituals and functions of medicine as a behavioural system⁹. Today, the sociology of medicine goes beyond the areas Strauss delineated. It also includes the experience that accompanies individuals in illness, the aspect of chronic illness, non-medical treatments such as unconventional medicine. The scale of the use of unconventional medicine makes this social phenomenon play an important role in the creation of ideas about treatment methods and the emergence of new health authorities. Interest in the subject of illness has been repeatedly addressed by the anthropology of medicine. The ways in which individuals cope with illness and illness itself are considered within ethnomedical studies. Multiple aspects such as the symbolic meaning and 'language of illness' are emphasised, the classification of illnesses is explored, and the impact of diagnosis on the therapy undertaken by the individual is examined.

This article attempts to analyse the phenomenon of unconventional medicine and its social consequences using the example of homeopathy. An additional very important factor whose correlation we decided to investigate is the level of belief and magical practices of homeopathy users. It should be emphasised that, according to international research, alternative therapies have experienced tremendous growth over the past 30 years in most Western countries. This can be broadly linked to processes of secularisation and the rise of non-religious spirituality, a holistic worldview and related alternative medicine practices¹⁰.

plementary and alternative medicines use in COVID-19: A global perspective on practice, policy and research", *Res Social Adm Pharm*, Vol.18(3), 2022, 2524-2528. doi: 10.1016/j.sapharm.2021.05.004. Epub 2021 May 13. PMID: 33992585; PMCID: PMC8116135.

8 World Health Organization, "WHO global report on traditional and complementary medicine 2019. World Health Organization", 2019, <https://apps.who.int/iris/handle/10665/312342>.

9 Michał Skrzypek, „Geneza i ewolucja podstawowych kategorii analitycznych socjologii medycyny”, *Medycyna Ogólna i Nauki o Zdrowiu*, Vol. 18 (4), 2012, 317-378

10 Jens Schlieter, "Buddhist insight meditation (Vipassanā) and Jon Kabat-Zinn's Mindfulness-based Stress Reduction: an example of dedifferentiation of religion and medicine?", *Journal of Contemporary Religion*, Vol. 32(3), 2017, 447-463. <https://doi.org/10.1080/135>

The article is based on the results of a survey conducted in a closed group on the social networking site Facebook. The main issues we analyse in this article are the sense of awareness of the use of homeopathic practices, what influence having elementary scientific knowledge has on the use of unconventional medicine, and the correlation between medical practices and religious practices.

Body and mind - about the placebo effect

At first glance, it seems obvious that the body is a kind of tool for communicating emotions and expressing our mood, if only through non-verbal speech. The body often betrays us by blushing, a closed posture or nervous laughter. Our emotions find an outlet in tears, laughter or a face full of disapproval. "In the classical cognitive approach, the mind is a control system that determines the behaviour of a system when interacting with a complex, time-varying environment; realised through multiple interacting systems, it acts on the basis of accumulated knowledge. Such a system can be considered a personal, ego-centric, subjective simulation model of the world. Ego-centricity implies intentionality, an active search for meaning, and thus the need to make narrative sense of experienced events. 'Model' implies conceptual capture, symbolic representations."¹¹ The mind represents a kind of information base, a set of actions. According to many researchers, in simple terms, the mind is what the brain does. This is one of the first statements that we can consider as an affirmation of the link between the mind and the body. If we assume this statement to be true then every action initiated by the brain in relation to the body belongs to the realm of the mind. A far-reaching assumption can be made that the mind constitutes the body and the body constitutes the mind. For example, breathing is considered to be an automatic process controlled by the brainstem - the part that controls vital functions such as heartbeat and sleep patterns. There have also been studies involving recordings of brain function that show that breathing also affects the brain itself. In short, changes in breathing - for example, a different breathing frequency or paying particular attention to the process itself - engage different areas of the brain. The control of breathing by the brainstem is a perfect example of the connection between our physicality and the mental realm. The brain is not only about the flow of impulses or the brain ganglia, but also about self-awareness, the initiation of the individual's perception of himself. Touching on this subject, it is difficult

37903.2017.1362884

11 Władysław Duch, „Umysł, świadomość i działania twórcze”, *Kognitywistyka i media w edukacji*, Vol.1,2008, 1-25

not to mention Antonio Damasio's work *The Descartes Error*. Damasio suggested at the beginning of his work that feelings have a great influence on the mind, the brain systems used by the former are also needed by the latter, and all these individual systems intertwine with the systems that regulate bodily actions. The invocation of Descartes seems necessary, who is described as a symbol of the way in which the body, brain and mind are understood.

Descartes' dualistic conception of mind and body in the idea that the two are related, but only in the sense that the mind is a kind of program running in a computer and the computer is the brain. The former could not exist without the biological support of the latter. What was Descartes' mistake? Damasio focuses on Descartes' statement *I think, therefore I am*. If this statement is taken literally, then on the question of the origin of the mind and the relationship between the mind and the body, it represents the opposite view to the one professed by Damasio. He believes that thinking and its consciousness are real elements of being, while Descartes imagined thinking as completely separated from the body, introducing a division between the 'thinking thing' and the 'non-thinking body' separated from it, which is a certain extension or mechanism controlled by it. We do not agree with the separation of thought and mind from the body. We think that on the basis of biological aspects and psychological considerations of the mind, it can prove that the mind and the body share an inseparable bond. In fact, the body is a kind of map of emotions. It reveals, through the expression of emotions and their primary dimension, the full spectrum of our experiences. Damasio "argued convincingly that there is no necessary conflict between reason and emotion—indeed, that emotion can support rational thought, and often does. To describe how cognition and emotion can interact when people choose"¹².

Descartes' greatest mistake was to separate by a large space the body and the mind, the tangible, measurable, operating by some mechanism, infinitely divisible body and the intangible, immeasurable, untouchable and indivisible mind. Suggesting that reasoning, moral judgement and suffering born of physical pain or emotional rapture can exist separately from the body. Damasio's work notes that his error was to separate the most sophisticated mental operations from the structure and functioning of the biological organism¹³. Damasio also presents a theory of somatic markers, which also seems necessary to cite here. Somatic markers are types of feelings generated from sec-

12 Geir Overskeid, „Can Damasio's Somatic Marker Hypothesis Explain More Than Its Originator Will Admit?“, *Frontiers in Psychology*, Vol.11,2021 <https://doi.org/10.3389/fpsyg.2020.607310>

13 Antonio Damasio, *Błąd Kartezjusza: emocje, rozum i ludzki mózg*, (Poznań:Rebis,2002)

ondary emotions. They provide a physiological signal to the individual about the anticipated consequences of a decision. They are a kind of alarm that our brain produces on the basis of previous experiences. José M. Muñoz emphasises: "Somatic markers, which are managed by the prefrontal cortex and able to act consciously or unconsciously, operate as assistants in decision-making processes, because they can immediately lead us to dismiss, or to consider, one option versus other alternatives"¹⁴

The creator of this concept is António Rosa Damásio. In a way, the somatic marker forces us to pay attention to the negative effects that an action may cause. It is a kind of our peculiar alarm system shouting to us to beware of danger. It reminds us that choosing a certain option can lead to dangerous consequences. For example, we know that if we cheat on our partner it will come out sooner or later, but the somatic markers alerting us thus give us the opportunity to consider the decision with its consequences. The author of the somatic marker hypothesis reveals a whole new picture of what we call rationality. He believes that "the action of biological drives, bodily states and emotions is probably the necessary basis of rationality". According to him, emotional processes, somatic sensations are the basis through which man makes his important decisions.

In our article, we point out the inextricable link between mind and body, because an important aspect of the very being of unconventional medicine is the placebo effect. The placebo effect is one of the intrinsic elements of unconventional medicine¹⁵. It is what makes substances diluted to one thousandth work. We consider the placebo effect to be one of the mechanisms by which homeopathy has so many supporters.

The placebo effect itself has many definitions, both from a medical, legal and psychological perspective. For the purposes of this paper, We adopt the definition provided by Barbara Dolińska: "(...) a placebo is a therapeutic or research method whose effectiveness does not depend on its specific, defined properties, but on the variables accompanying its use. Manipulation of the variables accompanying the administration of a placebo can lead to changes in its effectiveness, both positive and negative."¹⁶ The placebo effect itself has been used for years in medicine as a

14 Jose M. Muñoz, "Somatic Markers, Rhetoric, and Post-truth", *Frontiers in Psychology*, Vol.8 (1273),2017 . doi: 10.3389/fpsyg.2017.01273.

15 Aijing Shang , Karin Huwiler-Müntener, Linda Nartey, Peter Jüni, Stephan Dörig, Jonathan A C Sterne, Daniel Pewsner, Matthias Egger, „ Are the clinical effects of homoeopathy placebo effects? Comparative study of placebo-controlled trials of homoeopathy and allopathy”, *Lancet*, Vol.366(9487),2005,726-32. doi: 10.1016/S0140-6736(05)67177-2. PMID: 16125589.

16 Barbara Dolińska, Placebo. Dlaczego działa coś, co nie działa?, (Sopot: Smak Słowa, 2011).

way of assessing the effectiveness of treatments. For example, when testing a drug, we create two trials, one of which receives the drug and the other a substance that has no effect on the dedicated disease. When patients feel an improvement after using the preparation, we can determine whether this is due to the belief in the effect or the effect of the substance on the disease entity in question. One of the common statements of belief makes miracles in the subject of the placebo effect may prove to be a common-sense explanation. Irwing Kirsh drew attention to response expectation, the point at which the patient expects improvement depending on his or her will. Response expectation is so important because it is self-affirming in nature. Psychology has repeatedly demonstrated that the appropriate formulation of a hypothesis can cause the subject to unconsciously manifest reactions favourable to its confirmation. The operation of the placebo effect is an example of the inextricable link between body and mind. Nicholas Humphrey notes that research in the field of neuroimmunology reveals close links between the central nervous system and the immune system. Several types of neurotransmitters double up as signalers of immune activation and vice versa.¹⁷ The issue of the placebo effect is the duration of its effect on the individual. Many researchers compare its effect to a normal distribution. A period of improvement is a natural stage in treatment, or when the individual is not taking any medication.

Research methods

The study was carried out using a quantitative method, an online questionnaire technique consisting of closed questions. The questionnaire was completed using the LimeSurvey website in a closed group located on Facebook. The survey proceeded as follows, in the first stage We added myself as a member of the group to get the opportunity to obtain respondents. We answered the necessary questions and was a member of the group from 17 June 2019. Before submitting the questionnaire, we did a pilot on the herbal medicine group so as to check the readability and clarity of the posted questions. The pilot was not included in the results of the survey, but gave me valuable technical guidance. He also drew my attention to the order in which the questions were asked, how important it is so as to avoid a rolling effect.

It proved problematic to obtain respondents, despite the information being made available with a request to complete the survey, we received in-

17 Nicolas Humphrey, "Great expectations: the evolutionary psychology of faith healing and the placebo response", in: Lars Backman, Claes von Hofsten (Eds.), *Psychology at the Turn of the Millennium*, Vol. 2, (London: Psychology Press, 2002) <https://doi.org/10.4324/9780203989432>

complete 40 responses from the entire group. This effect may be due to the cliquey nature of the group, a fear of using the information contained in the group even for scientific purposes. Unconventional medicine has been subjected to repeated denial by the scientific community¹⁸, so I am guessing that this may be one of the reasons for such a low response rate. Over the course of two weeks, we wrote in private messages to users of the group asking them to complete the survey and assuring them of complete privacy. The amount of data collected, which is not a representative sample, does, however, allow us to illustrate the phenomenon of unconventional medicine.

The sample is purposive in nature. The sample included members of the online group located on Facebook “Homeopathy Poland - classical, clinical. Detoxification”. The group was chosen because of its specificity and closed nature. Despite its large size (24,807 users), in order to join the group, one has to perform a number of tasks. You have to answer a questionnaire with a series of questions, such as: what are you going to use the group for, do you know homeopaths in your region, have you used homeopathy, how did you find out about the group. Next, you have to accept the group’s terms and conditions, which sound quite similar to most group terms and conditions found on Facebook with one exception: “6. Use of the group is voluntary. Members who are inactive, do not contribute to the group, or speak unfavourably about homeopathy will be removed from the group.”. Translated into practice, users who do not comment, do not like, or do not express themselves on a topic known to them are removed from the group. This results in a high level of activity among group members giving a great sense of belonging and identification with the group.

At the beginning of the questionnaire, there was a metric through which I obtained the demographic variables of the study group. The next part of the metric referred to the religious practices of the respondents. We used the PolDUREL questionnaire after Beata Dobrowolska¹⁹. The author emphasises that religiosity has been identified as an important factor in psychosocial health, which is relevant to my work. The use of the variable faith is intended to show the relationships that occur among users of non-conventional medicine.

18 Elizabeth Frances Caldwell, “Quackademia?: Mass-Media Delegitimation of Homeopathy Education”, *Science as Culture*, Vol.26 (3), 2017, 380-407 <https://doi.org/10.1080/09505431.2017.1316253>.

19 Beata Dobrowolska, Krzysztof Jurek, Anna B. Pilewska-Kozak, Jakub Pawlikowski, Mariola Drozd, Harold Koenig, „Validation of the Polish version of the Duke University Religion Index (PolDUREL)”, *Pol Arch Med Wewn.* Vol.126 (12), 2016, 1005-1008 doi:10.20452/pamw.3721

My aim was to see to what extent religious practices influence the use of homeopathy. The questions that were asked were as follows:

- How often do you go to church or other religious meetings?
- How often do you make time for private religious practices such as prayer, meditation or Bible reading?

A block of questions regarding respondents' perceptions of religious experience. Where respondents indicate to what extent they agree with the statements listed below.

- I experience the presence of God in my life.
- My religious beliefs underpin my whole approach to life.
- I try very hard to let my religion project into all other areas of my life.

The next part of the survey consisted of the questions proper. Question one contained nine popular homeopathic preparations. The list was compiled in collaboration with pharmacists, who provided the most frequently chosen homeopathic remedies. In the study, we assumed that homeopathy is the highly diluted preparations of symptom-causing substances in healthy individuals are used to stimulate healing in patients who have similar symptoms when ill. Individualised homeopathic treatment (IHT) involves prescribing an individually selected homeopathic medicine based on the totality of symptoms found after a full clinical examination of the patient²⁰.

The list was contrasted with the preparations that also appeared in the discussion at the study group. The question was designed to test whether the respondents were only interested in homeopathy or whether they used it in the process of treating themselves and their loved ones. Testing familiarity with popular preparations may suggest the respondents' level of knowledge of homeopathy. The question was as follows: Have you used any of the following preparations? [Please tick all preparations you have used]. The respondents were given a list of the 9 most popular homeopathic preparations indicated by the pharmacists:

- Ricinus Communis (lactation balls)
- Chamomilla vulgaris (teething ointment)
- Ignatia amara (immunity tablets)
- Boiron Cina (parasite tablets)

20 Emma Del Carmen Macías-Cortés, Lidia Llanes-González, Leopoldo Aguilar-Faisal, Juan Asbun-Bojalil, "Individualized Homeopathic Treatment and Fluoxetine for Moderate to Severe Depression in Peri- and Postmenopausal Women (HOMDEP-MENOP Study): A Randomized, Double-Dummy, Double-Blind, Placebo-Controlled Trial", PLOS ONE, Vol. 10(3): e0118440. <https://doi.org/10.1371/journal.pone.0118440>.

- Cinnabaris - Diagogmed (sinus tablets)
- L72 (drops for sleep disorders)
- Traumeel (drops for injuries, sprains, bruises)
- Angin Heel (throat tablets)
- Thonsilan (spray for tonsillitis)

In conversations with pharmacists, the theme of patients' unconscious use of homeopathy often came up. In the study conducted for this thesis, we also attempted to test the aspect of unconscious use of homeopathy. One of the everyday phenomena is the use of doctors who also use homeopathy in the treatment process. The unknowing patient buys the preparations as recommended by the treating physician, thus benefiting from unconventional treatment. Based on conversations with pharmacists, we decided to supplement the survey with a questionnaire on the very awareness of the use of homeopathy and the use of advice from a homeopathically qualified doctor.

By comparing the answers to questions P1, P2 and P3, we were able to determine the respondents' state of conscious use of the mentioned preparations. The use of non-conventional medicine also carries a certain dimension of magical thinking. We decided to check the aspect of belief in magical elements by means of declarations of use of other specialists. Question P5 listed a specialist in non-medical practices such as an energy therapist, witch doctor, whisperer, fortune teller or herbalist. The next question sought to verify whether the respondents were isolated in their practices or whether their relatives also used such healing modalities. The question was: Have any of your parents, relatives used homeopathic remedies? Respondents could answer yes, no or not sure. The last question asked about the level of general elementary knowledge. Respondents ticked true or false for statements concerning general knowledge.

In this case, one of the statements may not be authoritative. The questionnaire was sent out around the time of the pandemic outbreak, hence the statement "The period in which a person has the infection but does not show symptoms is the incubation period." May not be credible. This was knowledge at the time that was repeatedly promoted and updated in the media, on the internet and by the respondents themselves because of the prevailing epidemic. The statements that appeared in the question were as follows:

- Oil, natural gas and coal are examples of fossil fuels.
- Inserting a gene into plants that makes them resistant to insects is an example of genetic engineering.
- The main reason for the seasons on Earth is the tilt of the Earth's axis in relation to the sun.

- The period during which a person has an infection but does not show symptoms is the incubation period.
- Overuse of antibiotics can lead to antibiotic-resistant bacteria.
- Heartburn remedies relieve an overly acidic stomach, due to the fact that the main ingredients of the drugs are alkalis.

Analysis of the material collected

A total of 123 people took part in the survey, including 94 complete responses. The full survey responses included 64 women (68.09% of the total) and 29 men (30.85% of the total). The significant disparity between the groups is due to the structure of the group, the majority of active users being female. People between the ages of 23 and 64 took part in the survey. The average age was 37 years. The overwhelming majority of respondents in the survey had a general secondary education (86.2%). Tertiary education is the predominant educational attainment among respondents (34.04% of the total), while primary education and basic vocational education are the least common (2.13% of the total each). In terms of education, the group does not reflect a normal distribution of the population. The variation among the respondents' educational backgrounds may be due to the diversity of the places in which they live. As many as 39.6% of respondents live in cities with up to 250,000 inhabitants, while the smallest number of respondents live in small towns with up to 50,000 inhabitants, only 7.45%. In the next part of the metric, respondents were asked about their religious practices and related beliefs. Among respondents to the question about the frequency of private religious practices, the answers were "rarely or never" (41.5%) and "once a week" (29.8%). The least frequent response was 'more than once a week' (2.1%). The fluctuations that appeared in the distribution of religious practices differ from the data collected in the 2018 report prepared by the Centre for Public Opinion Research²¹. According to the report, in Poland we can see a downward trend when it comes to performing religious practices since 1997. However, despite this, the differences between the group of respondents and the general population are significant. In the report, as many as 49% of respondents performed religious practices regularly, 38% irregularly, while 13% described themselves as not practising in 2018. Trying to compare the survey We conducted with the report, it can be seen that among the surveyed group, the lack of religious practices prevails or they are sporadic. Not a great number of respondents regularly perform religious practices.

21 CBOS, „Religijność Polaków i ocena sytuacji Kościoła katolickiego”, Vol. 147, 2018, https://www.cbos.pl/SPISKOM.POL/2018/K_147_18.PDF,

The most common response among respondents was ‘rather true’ (29.8%) and ‘definitely true’ (23.4%). The rarest assessment was that respondents were not sure whether the statement was true or not (5.3%). The largest proportion of respondents believe that their religious beliefs impinge on their overall approach to life, as many as 27.7 % of respondents answered that the statement was rather true. This was the most frequently chosen answer. However, it is interesting to note that slightly fewer (23.4%) of the respondents consider the statement to be definitely not true. The most common response from respondents is to identify the statement “I try very hard to let my religion project into all other spheres of my life” as definitely not true (28.7%). 24.5% of respondents rated the statement as rather true.

When asked the question “Do you know what homeopathy is?” 87.2% of respondents answered in the affirmative. It would seem obvious that respondents, due to the series of questions they have to answer to get into the group, know what the field of homeopathy does. 4.3% of the respondents answered ‘no’. It is questionable how the individuals in question got into the group, it also raises the question at what time of the group they joined. The remaining 8.5% of respondents did not answer the question.

When asked whether you had used the advice of a specialist (doctor) with homeopathic qualifications, 56.4% of respondents answered in the affirmative. This may suggest that some of the respondents take advice appearing on the group or use homeopathy on their own. The answers that appear so far to the questions suggest that respondents largely use unconventional medicine consciously, but not always with the consultation of a specialist. On the other hand, however, international studies indicate that during the Covid-19 period, many doctors suggested various alternative practices and preparations, including yoga, ayurveda and homeopathy, to patients in addition to standard treatment²². The next question in the questionnaire was “Have you used the advice of: whisperers, witch doctors, herbalists fortune tellers, none of the above.”

Respondents were most likely to have used herbalists (answer ‘yes’ 62.8%) and least likely to have used a witch doctor (answer ‘yes’ 4.3%). Interestingly, the answer “none of the above” was given by only 6.4% of respondents. The services of whisperers were used by 10.6% of respondents, while the services of a fortune-teller were used by 9.6%. To the question “Have any of your parents, relatives used homeopathic remedies?”, respondents answered as fol-

22 Sae-Rom Jeon, Jung Won Kang, Lin Ang, Hye Won Lee, Myeong Soo Lee, Tae-Hun Kim, “Complementary and alternative medicine (CAM) interventions for COVID-19: An overview of systematic reviews”, *Integr Med Res*, Vol.11(3):100842, 2022, doi: 10.1016/j.imr.2022.100842. Epub 2022 Mar 13. PMID: 35308033; PMCID: PMC8918082.

lows: 51.1% of respondents believe that their parents, relatives have used homeopathic treatment, 17.0% gave a negative answer, 23.4% of respondents are not sure if their relatives have used this type of treatment. The question was not answered by 8.5% of respondents.

To the question “What treatments were used in your home when you were a child?”, the surveys answered as follows:

- the services of a homeopath were used: yes - 10.6%, no - 80.9%, no answer - 8.5%
- used herbs and folk prescriptions: yes - 50%, no - 41.5%, no answer - 8.5%
- bioenergetherapist used: yes - 3.2%, no - 88.3%, no answer - 8.5%
- whisperers, witch doctors were consulted: yes - 16.0%, no - 75.5%, no answer - 8.5%
- none of the above: yes - 39.9%, no - 59.6%, no answer - 8.5%.

The next question was designed to test the basic knowledge of the respondents. The question included statements that the respondents had to identify as true, false, or mark the statement as “don’t know/not sure”. The results were as follows by statement:

- Oil, natural gas and coal are examples of fossil fuels.
True •70.2%, false •14.9%, I have no opinion •6.4%
- Inserting a gene into plants that makes them resistant to insects is an example of genetic engineering.
True - 64.9%, false -19.1%, I have no opinion 7.4%
- The main reason for the seasons on Earth is the tilt of the Earth’s axis in relation to the sun.
True - 55.3%, false - 22.3%, I have no opinion 7.4%
- The period during which a person has an infection but does not show symptoms is the incubation period.
True - 59.6%, false - 13.8%, I have no opinion 18.1%
- Overuse of antibiotics can lead to antibiotic resistant bacteria.
True - 75.5%, false - 8.5%, I have no opinion - 7.4%
- Heartburn remedies relieve an overly acidic stomach, due to the fact that the main ingredients in the drugs are alkalis.
True - 53.2%, false -14.9%, I have no opinion 23.4%.

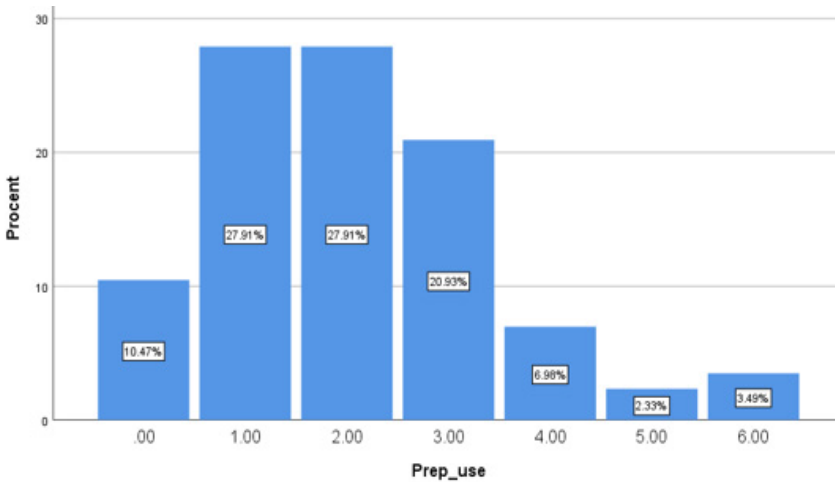
Hypothesis one assuming that the vast majority of respondents are aware of the use of homeopathy verified itself. All respondents who indicated the use of at least one homeopathic preparation also gave an affirmative answer re-

garding their knowledge of the concept of homeopathy. In the question asked “Do you know what homeopathy is?” 87.2% of the respondents answered in the affirmative. In verifying the hypothesis, we used the following questions:

- P1. Have you used any of the following preparations?
- P2. Do you know what homeopathy is?
- P3. Have you used any of the homeopathic remedies?

For the first question, the aggregated answers gave the following results:

Chart 1. Number of homeopathic preparations declared. Source: Own study.



Failure to tick the answer of using any of the preparations listed may suggest that respondents have used less popular remedies or are just beginning their journey with alternative medicine. Respondents’ answers from questions P2 and P3 were summed. The answer “yes” was assigned a value of 1, while “no” was assigned a value of 0. This gave me a distribution of answers with a breakdown of yes for one question, two questions or none. A positive response to both questions was declared by 58.14% of respondents. A negative response to both questions was declared by 11.63% of respondents.

The second assumption confirmed by the study is that homeopathy users are mostly women. Complementary and alternative medicine (CAM) has seen a significant increase in popularity since 1970 and it has been observed that both users and practitioners are more likely to be women. CAM can provide a space that allows women to address their health issues; resist the patriarchal medicalisation of conventional practice; and provide opportunities to enhance

women's self-realisation²³. Research indicates that the sector of the economy known as the holistic environment in which alternative spirituality or homeopathy is transformed into commercial products and services dominated by women as producers and consumers²⁴. This may therefore explain the dominance of women in this type of group. We made this assumption before analysing the study group. For verification, we again used an artificially created variable to determine the use of homeopathy (summary of questions P2 and P3 - homeo_use). The data were as follows:

Table 1: Cross tabulation of the variables gender and use of homeopathy.

Source: Own study.

		M1. Gender:		In total	
		Woman	Man		
Homeo_use	.00	quantity	5	5	10
		% in total	5.8%	5.8%	11.6%
	1.00	quantity	16	10	26
		% in total	18.6%	11.6%	30.2%
	2.00	quantity	38	12	50
		% in total	44.2%	14.0%	58.1%
Summary	quantity	59	27	86	
	% in total	68.6%	31.4%	100.0%	

In addition to the combination of variables, the proportion of respondents is important in the verification of the hypotheses. 31.4% of those responding are male, while 68.6% are female. This reflects the distribution of the users of the group of whom 71.2% are women and 28.8% are men. The age distribution of respondents does not reflect the age distribution of the surveyed group. Therefore, it cannot be taken into account when analysing the use of homeopathy following the age variable.

Another hypothesis analysed is that people who consciously use unconventional medicine are most likely to have basic scientific knowledge. This hypothesis was not positively verified. The variable indicating the basic knowl-

23 Sarah Cant, Peter Watts, "Hidden in Plain Sight: Exploring Men's Use of Complementary and Alternative Medicine", *The Journal of Men's Studies*, Vol.27(1),2018, 45-65. <https://doi.org/10.1177/1060826518778839>.

24 Scott Taylor, "Gendering the holistic milieu: A critical realist analysis of homeopathic work", *Gender, Work and Organisation*, Vol.17, 2009, 454-474. <https://doi.org/10.1111/j.1468-0432.2009.00478.x>.

edge of the subjects does not correlate with any of the other variables. The data do not have a natural distribution, so we used Kendall’s non-parametric test.

Table 2. Correlation between variables: religious practices performed, use of homeopathy, use of homeopathic preparations and elementary scientific knowledge. Source: Own Study.

		Correlations							
		Rel_ext	Rel_int	Prep_use	Homeo_use	Super_use	Parent_use	Correct	
Kendall's tau_b	Rel_ext	Correlation Coefficient	1.000	.654**	-.130	.073	.196*	.113	-.038
		Sig. (2-tailed)	.	.000	.127	.417	.027	.226	.656
		N	92	88	84	85	85	85	85
Rel_int		Correlation Coefficient	.654**	1.000	-.020	.122	.264**	.258**	.009
		Sig. (2-tailed)	.000	.	.822	.182	.003	.006	.916
		N	88	88	80	83	83	83	83
Prep_use		Correlation Coefficient	-.130	-.020	1.000	-.119	-.023	.176	.045
		Sig. (2-tailed)	.127	.822	.	.225	.814	.082	.627
		N	84	80	86	79	79	79	79
Homeo_use		Correlation Coefficient	.073	.122	-.119	1.000	.240*	.101	.181
		Sig. (2-tailed)	.417	.182	.225	.	.015	.329	.053
		N	85	83	79	86	86	86	86
Super_use		Correlation Coefficient	.196*	.264**	-.023	.240*	1.000	.278**	.020
		Sig. (2-tailed)	.027	.003	.814	.015	.	.006	.829
		N	85	83	79	86	86	86	86
Parent_use		Correlation Coefficient	.113	.258**	.176	.101	.278**	1.000	.093
		Sig. (2-tailed)	.226	.006	.082	.329	.006	.	.340
		N	85	83	79	86	86	86	86
Correct		Correlation Coefficient	-.038	.009	.045	.181	.020	.093	1.000
		Sig. (2-tailed)	.656	.916	.627	.053	.829	.340	.
		N	85	83	79	86	86	86	86

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

This may be influenced by the education of the respondents, the vast majority of whom had more than secondary education. This may also suggest that there is no correlation at the level of knowledge and variables such as religious practices, use of homeopathy, use of homeopathic preparations in this group. The study group is clique specific in nature. A clique group is one in which members have a significant level of social connection due to shared interests and similar levels of knowledge²⁵. In order to get into the group, a number of tasks have to be completed, which suggest that the respondents have to commit themselves in order to participate. Factors such as other group members educating each other or sharing acquired knowledge may also be important here.

25 Hakan Yildiz, Christopher Kruegel, “Detecting social cliques for automated privacy control in online social networks,” *IEEE International Conference on Pervasive Computing and Communications Workshops*, 2012, 353-359, doi: 10.1109/PerComW.2012.6197509.

Another of the hypotheses analysed is that people who perform religious practices are less likely to use homeopathy. This hypothesis was negatively verified. The relationship between the variable use of homeopathy and performing religious practices is stochastic. Correlation does not occur. This may be influenced by the lack of a strong connection between homeopathic practices in Poland and declared religious practices.

However, the variable of use of homeopathy enters into correlation with the use of other unconventional practices, such as energy therapists, quacks, whisperers, fortune tellers and the services of herbalists. It can be presumed that people who use unconventional medicine use multiple practices simultaneously. Belief in magical thinking may be one of the reasons why respondents use homeopathy. Holly Folk states that many alternative medicine practices contain numerous spiritual and magical elements that most consumers are unaware of²⁶.

Table 3 Correlations between the variables religious practices and the variable use of homeopathy. Source: Own study.

Correlations		Rel_ext	Homeo_use
Tau b Kendall	Rel_ext	Correlation coefficient	1.000
		Relevance (bilateral)	.073
		N	.417
	Homeo_use	Correlation coefficient	92
		Relevance (bilateral)	85
		N	.073
	Homeo_use	Correlation coefficient	1.000
		Relevance (bilateral)	.417
		N	.85
			86

The last hypothesis, is that people who describe themselves as believers are less likely to use homeopathy. Another hypothesis that has not been positively verified. One reason could be the conscious use of homeopathic practices by the majority of people surveyed. Or not linking the actions performed with faith, considering them as separate and independent from each other. Not contradicting each other. This may also be due to the correlation between the practices performed and the actions that the parents of the subjects took

26 Holly Folk, "Homeopathy and chiropractic in the United States and beyond", in: Dorothea Lüddeckens, Philipp Hetmanczyk, Pamela E. Klassen, Justin B. Stein (Eds.), *The Routledge Handbook of Religion, Medicine, and Health*, (London: Routledge, 2021) <https://doi.org/10.4324/9781315207964>.

Table 4. Cross tabulation showing percentage distribution of homeopathy users and use of homeopathic medicines by parents, relatives of respondents.

Source: Own study.

		P6. Have any of your parents, relatives used homeopathic medicines?			In total	
		No	Yes	No answer		
Homeo- use	0.00	quantity	5	1	4	10
		% in total	5.8%	1.2%	4.7%	11.6%
	1.00	quantity	5	13	8	26
		% in total	5.8%	15.1%	9.3%	30.2%
	2.00	quantity	6	34	10	50
		% in total	7.0%	39.5%	11.6%	58.1%
Summary	quantity	16	48	22	86	
	% in total	18.6%	55.8%	25.6%	100.0%	

Increasingly, there is a phenomenon of the growing popularity of unconventional medicine²⁷. This can be influenced both by practices carried out by parents and by the promotion of alternative lifestyles by those relevant to the research.

On the web, we can find the emergence of new treatment methods, for example the rise of total medicine. This method of treatment assumes that all the illnesses that occur in our bodies originate from the trauma that our ancestors experienced. It has no scientific evidence, but the circle of supporters is growing every year.

Positive verification has occurred with hypotheses:

- The vast majority of respondents are aware of the use of homeopathy.
- Those who use homeopathy are mostly women.

Negative verification occurred for the hypotheses:

- People who consciously use unconventional medicine are most likely to have basic scientific knowledge.
- Persons making religious practices are less likely to use homeopathy.
- People who describe themselves as religious are less likely to use homeopathy.

27 Hilary A Tindle, Roger B Davis, Russell S Phillips, David M Eisenberg, "Trends in the use of complementary and alternative medicine by US adults: 1997-2002", *Alternative Therapies in Health and Medicine*, Vol.11,2005, 42-49. PMID: 15712765.

Despite little verification of the hypotheses, the study provided interesting findings for analysis. In many of the questions, we accepted the option of answering yes, no. The use of a Likert scale with several points could have provided more material for analysis. We believe that the online questionnaire meant that the phenomenon under study was not shown in full. The use of in-depth interviews with questions exploring the reasons for the phenomenon could have provided interesting data for analysis. The absence of a correlation between religious practices and the use of homeopathy may be due to the fact that people who use non-medical treatments do not seek validation of their actions in a professed axionormative system. On the other hand, it may also indicate that homeopathic practices are very similar to so-called faith healing and are often based on similar rituals²⁸. In subsequent research, we would like to examine what factors influence the popularity of non-conventional medicine. Perhaps they should not be sought in religious practices, but rather in the need for action, or the thread of acceptance by society of certain actions.

Conclusions

This article has provided insight into the phenomenon of non-conventional medicine using homeopathy as an example. Despite the lack of verification of hypotheses, our study has shown some correlations, or rather the lack of them, between religious practices and the use of non-medical practices. The paper may be a starting point for further studies analysing the phenomenon of unconventional medicine. Although the results are not conclusive, we believe that one of the important indications of this work is the correlation between magical practices, such as the use of psychics, quacks or bioenergotherapists, and the use of homeopathy. This suggests a belief in the healing power of non-medical activities. Homeopathy itself, is based on the assumption of an inseparable relationship between mind and body, as well as the placebo effect. It could be interesting to investigate this phenomenon experimentally. To illustrate, through research, the correlation between the belief in their effect and the effect of homeopathic preparations.

28 David M. Shaw, "Homeopathy is faith healing without religion", *Focus on Alternative and Complementary Therapies*, Vol.19, 2014, 27-29. <https://doi.org/10.1111/ftc.12091>.

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