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## **Rural women's health: examples of programs designed to support the health aspect of female rural population**

**Abstract.** Health is among the important topics addressed at an international level. It largely affects the physical condition of humans, and is a condition for proper physical and mental development. This paper is an overview of programs designed to ensure adequate preventive healthcare and health security for Polish women. It also focuses on presenting selected results of research carried out with a group of female inhabitants of the Gniezno district. The study provides grounds for concluding that while rural women are willing to access the services offered by the National Health Fund, they declare to pay out of their own pocket for half of their specialized doctor appointments.

**Keywords:** health economics, rural women, health, healthcare programs

### **Introduction**

Health is an important aspect of every human life, and a value everyone needs to function properly in every area of their lives (Alejziak, 2015; Paplicki, 2020). Today, there is a noticeable growing trend of people taking care of their health, which mostly results from the implementation of adequate awareness-raising measures for children and youth. Currently, female health is a topic addressed in publications by a number of researchers. According to the Central Statistical Office, women accounted for 52% of the population (nearly 19.7 million) in 2021, and the feminization ratio was 107 (111 in cities and 101 in urban areas). However, since 2022, more than 2 million girls and women have arrived from Ukraine to find refuge from the war with the Russian Federation in the Republic of Poland. Due to these developments, many reports and scientific papers put great emphasis on healthcare aspects related to providing appropriate medical support for women and girls in need.

Rural women's health is an important issue increasingly often addressed in the literature. In 2021, Poland had a female rural population of 6.6 million ([www. bdl.stat.gov.pl](http://www.bdl.stat.gov.pl)). According to the "New values for a new era" report (Report – Polish women,

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2021), more than a half (65%) of Polish women equate health with both its physical and mental dimension. The report also states that women take insufficient care of their health: half of them do not undergo periodic examination, and only 50% claim to follow a proper diet. In turn, a report by the National Public Health Institute – the National Institute of Hygiene (NIZP-PZH) suggests that the health of Polish women should be viewed as an investment by the Polish society. Women should be largely aware of their checkup and treatment opportunities, but first of all they must realize the importance of, and become actively involved in, preventive healthcare. Today, the diseases of affluence emerge as an important problem affecting women. The average life expectancy for Polish women is two years less than in other EU countries, mostly because of cancer and cardiovascular diseases.

Currently, strong emphasis has been placed on the National Health Program designed to coordinate and implement educational, preventive, research and supporting projects. The Program's new edition for 2021–2025 offers an extensive range of measures, including projects intended for women and young girls.

The purpose of this paper is to present a review of programs designed to ensure adequate preventive healthcare and health security for Polish women. The analysis was based on data made available by the Ministry of Health, and on industry reports, literature.

### **Selected examples of ongoing projects promoting female health**

Poland is currently running several health promotion campaigns, including “Planning a Long Life” (<https://planujedlugiezycie.pl/>), an important project extensively promoted in social media. It primarily addresses health promotion and preventive healthcare by indicating the need to undergo regular examination. Its main purpose is to build awareness and educate the Polish society through central- and local-level information, educational and promotional measures primarily focused on preventing cancer. This includes promoting (Study on health behaviors related to cancer ..., 2017):

- an active lifestyle,
- healthy nutrition,
- tobacco control,
- a limited use of alcohol,
- skin cancer (including melanoma) prevention,
- encouraging people to attend examination,
- breastfeeding.

Early detection of breast cancer, cervical cancer, colorectal cancer and lung cancer plays a pivotal role in these measures (Website of the Ministry of Health..., 2023).

Another crucial project, “40+ Healthcare Prevention” (<https://www.gov.pl/web/zdrowie/profilaktyka-40-plus>), is intended for men and women over 40. Its goal is to guarantee free checkup and diagnosis for all nationals over the age of 40, as well as to detect and prevent the development of disorders and illnesses. Introduced in 2021 by the Minister of Health, it provides for dedicated diagnostics bundles intended for

men and women, and a set of common checkups. The bundle delivered to women includes the following tests: CBC with differential and platelets; total cholesterol levels or lipid panel; blood glucose concentration; blood creatinine levels; ALAT, AspAT and GGT; uric acid concentration in blood; general urinalysis; fecal occult blood (using iFOB, an immunochemical test), body weight; arterial blood pressure; body height; waist circumference; and BMI ("40+ Healthcare Prevention", Website of the Ministry of Health. Checkup bundles..., 2023). To be eligible for the program, people need to take a survey through the Online Patient Account, be provided with a referral, and present themselves for the relevant checkups at a facility of their choice.

Cancer is among the most common causes of death in Poland, with cervical cancer being undoubtedly one of the major risks for female health and life. Therefore, HPV vaccines are offered to young girls and women (<https://szczepienia.pzh.gov.pl/szczepionki/hpv/>). In Poland, cervical cancer is the eighth deadliest cancer for women (National Cancer Register..., 2017). Introduced in early 2000s, HPV vaccines are a great step towards improved preventive measures as they protect against infection with a specific HPV type and against future development of cancer. Cervarix, an HPV vaccine, is available in pharmacies from November 1, 2021 at a surcharge of PLN 138.18 per unit. It is refundable in all registered indications, e.g. in preventing pre-cancerous genital changes in patients from the age of 9.

Another program of major importance put in place in Poland is the Breast Cancer Prevention Program (Mammography) (<https://pacjent.gov.pl/program-profilaktyczny/profilaktyka-raka-piersi>), primarily intended for women aged 50–69 who meet one of the following criteria:

- "have not undergone mammography in the last two years,
- received a written call for a second mammogram after 12 months due to being prone to risk factors,
- have not been previously diagnosed with breast malignancy" (Website of the Ministry of Health. Prevention of breast cancer..., 2023).

In 2021, 1,059,858 mammography examinations were performed as part of the Program. (Website of the Ministry of Health. Prevention of breast cancer..., 2023). The main goal of the project is to reduce breast cancer mortality in Poland, raise awareness of preventive measures, enable early diagnostics, and implement unified diagnostic procedures.

Cervical Cancer Prevention (Cytology) (<https://pacjent.gov.pl/program-profilaktyczny/profilaktyka-raka-szyjki-macicy>) is another important program established for women aged 25–59 who:

- "have not undergone cytology testing in the last three years,
- are prone to risk factors (HIV-positive women, immunosuppressive drug users, women infected with high-risk HPV types) and have not undergone cytology testing in the last 12 months,
- were treated for cervical cancer, upon completion of an oncological checkup" (Website of the Ministry of Health. Prevention of cervical cancer..., 2023).

In 2021, 376,791 cytological tests were performed as part of the Program (Website of the Ministry of Health. Survey of attitudes toward health..., 2023). In Poland, cervical cancer is the sixth most common cancer in women. About 3,000 women are diagnosed with it every year, and half of them die of it.

The last important aspect that needs to be addressed is mental health. According to the report on psychiatric treatment and on the prevalence of mental disorders (Chodkiewicz, 2021), the rural population accounted for 38% of all people hospitalized for mental issues in 2020. However, only 20% of the rural population accessed outpatient services (i.e. mental clinics, community mental health services). In turn, the results of the “Comprehensive study on public mental health and its conditions – EZOP II” indicate that panic attacks, stress disorders, depression and conduct disorders were more frequent in rural areas than in cities. Also, suicide was found to be more common in small towns and villages. Therefore, to address these issues, the Ministry of Health’s National Health Program includes measures taken to prevent suicide. As part of the National Health Program, everyone in need of help following a mental crisis may access free specialized support offered by the Adult Support Center on a 24h basis (Program for preventing suicidal behavior..., 2023). Furthermore, the Program initiated action to develop the mental healthcare model and equalize access to mental healthcare services across the country.

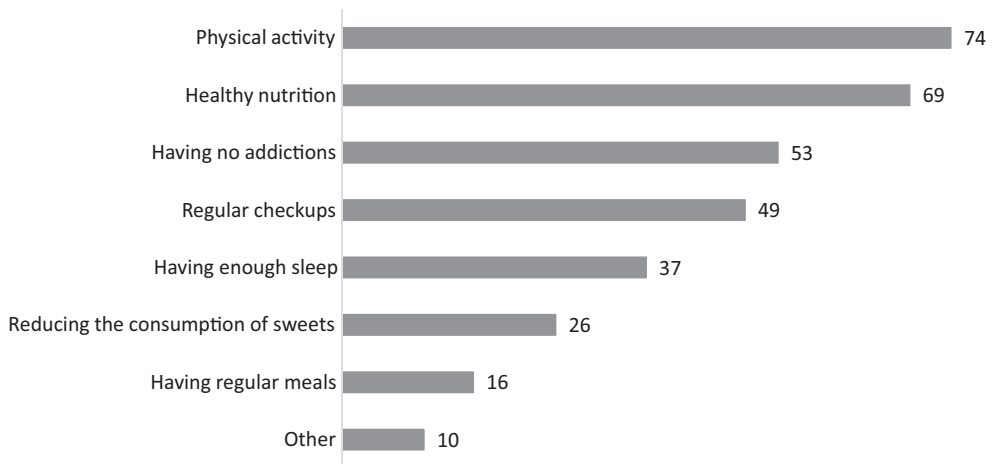
## **Material and method**

The purpose of this paper is to present a review of programs designed to ensure adequate preventive healthcare and health security for Polish women. The analysis was based on data made available by the Ministry of Health, and on industry reports, literature on the subject and selected results of the “Women’s health in the Gniezno district” research project. The study relied on a survey questionnaire administered to a group of 100 women, and was carried out between August and November 2022. The direct structured interview technique was used. The questionnaire was composed of 20 questions divided into three parts. The first part was focused on health-related issues, the second addressed the use of medical services, and the last part consisted of questions on barriers to and expectations for the services offered.

## **Results of the author’s own study**

The study covered 100 female residents of the Gniezno district of different ages (from 24 to 72). The largest group were women aged 35–46 (36.2%), followed by 47–57 year olds (26.5%), 24–34 year olds (18.2%), and 58–70 year olds (14.9%). Respondents aged over 70 accounted for the smallest part of the group (4.1%). More than half of interviewees (53.5%) had a tertiary education, and 41.6% were at a secondary level.

The first part of the questionnaire was intended to highlight the importance of health in women’s lives. It started by checking how the interviewees understand health (they were presented with terms they may associate with it) and how they take care of it.



**Figure 1.** What can be associated with health\* [N = 100, %]

\*It was possible to give more than one answer.

Source: own research.

Based on Figure 1, it may be noticed that *physical activity* is the most common association among the interviewees. They emphasized multiple times that regular activity such as running, walking or exercising at home, in the garden or gym can be equated with health. That opinion was significantly more common among young women aged 24–34 (as much as 70%), followed by those aged 35–46 (65%) and 47–57 year olds (45%). Note that similar findings were presented by the Ministry of Health in 2017. Based on the “Study on health behaviors related to cancer prevention in the Polish population, with particular focus on the attitudes of Polish women towards cervical cancer and breast cancer”, they confirmed that physical activity is the most common association with the word “health”. The second of the top three associations is healthy nutrition. The interviewees very often equated it with “eating fruits and vegetables”, “eating brown bread”, “drinking milk products and eating yoghurt”, “preparing balanced meals for children and family”. The third strong association is having no addictions. The most frequent replies were abstention from “smoking” and “alcohol”. Undergoing regular checkups was another highly-ranked association with health. Nearly half of the respondents confirmed it to be important. However, they differed in how they followed that recommendation (for more details, see below). Having enough sleep was also an important association indicated by the interviewees. They emphasized that “healthy sleep is the foundation of health”, “people need to calmly sleep without stress”, “sleeping at least 6 hours promotes health”. Ranked next was having regular meals and reducing the consumption of sweets. Associations listed in the “Other” category included “diet”, “green lifestyle”, “avoiding stress”, “not eating too much”, “not having copious meals in the evening”.

An important part of the study was to ask the women if and how they take care of their health (Fig. 2). Seventy-four respondents confirmed they do take care of their health condition, twenty of them regretted they do not, while six found it difficult to provide an exact answer. Women aged over 60 declared more frequently (35%) to take strong care of their health. In turn, the analysis of the way women take care of their health shows that the female population covered by this study declare to perform the following outdoor activities: “walking”, “running”, “gardening” and “Nordic walking”. These are the most common health-promoting activities cited by the interviewees. Being physically active is highly beneficial. First, it allows to get into good physical condition while contributing to a sense of mental and physical wellbeing. Moreover, physical activity certainly is a great way to stay fit and good-looking. The second important aspect in taking care of one’s health is to consume large quantities of fruits and vegetables. This is crucial as it may contribute to reducing the risk of certain diseases of affluence. Also, as corroborated by research, a regular and abundant consumption of fruits and vegetables reduces the risk of cardiovascular diseases. In turn, the Agricultural Report (2022) emphasizes that “40% of Poles eat extremely small amounts of fruits and vegetables (and only a few kinds of them). Women consume fruits and vegetables far more frequently than men”.



**Figure 2.** Ways of taking care of one’s health as indicated by the interviewees\* [N = 100, %]

\*It was possible to give more than one answer.

Source: own research.

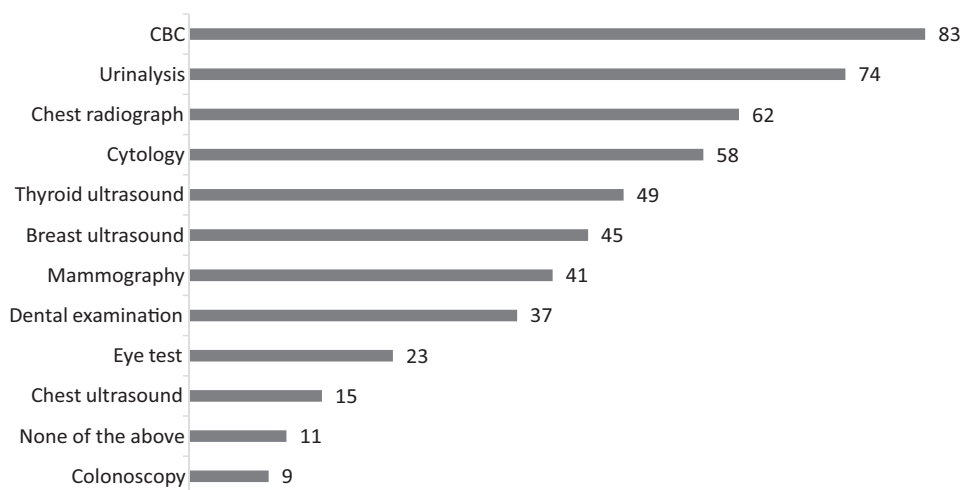
Nearly 3/4 of interviewees said they visit a doctor after noticing the first symptoms of a disease (cold, flu, COVID-19 – usually an online consultation). This is undoubtedly an important finding, because adequate prevention is a way to avoid severe illnesses. Another top-ranked healthcare declaration is the one related to reducing the use of stimulants. Today, there is a noticeable trend among young and mature people to abstain from smoking, as corroborated by research results presented by the Ministry of Health (2021), Koczkodaj (2021). Next, the interviewees indicated reducing the

consumption of sweets, avoiding fatty foods, and eating at the same time daily. They also paid attention to having enough sleep and drinking water.

The second part of the survey addressed the use of medical services and checkups. On that basis, the women specified how often they accessed services and indicated the examinations they received. Nearly 87% said they use primary physician services delivered under the National Health Fund. The analysis of the interviewees' ability to access specialized doctors reveals that while  $\frac{3}{4}$  of them use that kind of services, they do so in private medical institutions. In most cases, they visited gynecologists, cardiologists, consultants in internal medicine, endocrinologists, oncologists, rheumatologists, hematologists, orthopedists, neurologists, ophthalmologists and psychiatrists. Only 30 women said they access these specialized services under the National Health Fund. Unfortunately, this is the consequence of long waiting times for doctor visits. For instance, as at March 9, 2023, the average waiting time for a specialized medical appointment was as follows: 350 days for an endocrinologist visit; 304 days for a hematologist visit; 140 days for a rheumatologist visit; 110 days for an orthopedist visit; 59 days for an oncologist visit; 45 days for a dentist visit; and 36 days for a gynecologist visit ([swiatprzychodni.pl](http://swiatprzychodni.pl)). In turn, according to the "WHC Barometer Report: women waiting in line; how long do women wait for a medical appointment?", the average waiting time for services dedicated exclusively to women is 2.5 months.

It is extremely important to perform the examinations on a comprehensive basis because it allows to check the patient's health status and detect any disorders or diseases. The basic test that needs to be performed regularly is CBC. As shown in Figure 3, over 80 women took it, including 77 under the National Health Fund. Urinalysis, the second important checkup, was performed by over  $\frac{3}{4}$  of the interviewees (half of them took the test under National Health Fund). Today, chest radiograph has become the most common examination, because after the COVID-19 pandemic it is recommended to have it done to check the condition of the lungs and bronchi. Cytology, another top-ranked female checkup, should be performed regularly with the aim of preventing cervical cancer. Unfortunately, 42 interviewees did not undergo it in the last year. Nearly half of respondents had a thyroid and breast ultrasound test in the last year. Conversely, only 41% of interviewees decided to undergo mammography. Unfortunately, 11 women did not take any checkup within the last year.

Table 1 presents selected checkups intended for women, based on the "Female preventive healthcare" report (2021). The analysis of the respondents' declarations regarding their use of medical examinations shows that they undergo cytology and breast ultrasound testing every year. The "Study on health behaviors related to cancer prevention in the Polish population, with particular focus on the attitudes of Polish women towards cervical cancer and breast cancer" (2017) suggests that 85% have had a cytology test at least once in their lives. That ratio grows with age, and attains as much as 89% for women aged over 25. Both breast ultrasound and cytology are a crucial part of medical self-monitoring. Indeed, lung, breast, and cervical cancer



**Figure 3.** Medical services accessed by the respondents within the last year (selected aspects)\* [N = 100, %]

\*It was possible to give more than one answer.

Source: own research.

**Table 1.** Frequency of checkups primarily intended for women (as declared by the interviewees) [N = 100, %]

No.	Checkup	Once a year	Every 2–3 years	Every 4–5 years	Have not taken yet
1	Thyroid ultrasound	45	25	20	10
2	Breast ultrasound	88	7	4	9
3	Cytology	91	6	1	2
4	Mammography	11	39	2	48
5	Cardiological test	22	19	11	48
6	Chest ultrasound	11	23	39	27

Source: own research.

are the most common cancers in women. According to the latest National Cancer Register report published in January 2022, 171,000 people were diagnosed with cancer in 2019 in Poland, and more than 100,000 of them died of it (Website of the Ministry of Health..., 2023). More than 19,000 Polish women developed breast cancer, 9,000 developed cervical and ovarian cancer, and 8,500 developed lung cancer in 2019. In turn, between 20 and 40 women declared that they will undergo thyroid ultrasound, mammography, cardiological test and chest ultrasound within the next 2–3 years. Also, they say they will mostly focus on thyroid ultrasound and chest ultrasound testing in the next 4 to 5 years.



The last part consisted of questions on barriers to and expectations for the services offered. Next to long waiting times for specialized doctor appointments, the financial aspect turns out to be a key barrier to accessing medical services. The interviewees emphasized that long waiting times (especially when it comes to specialized doctors) and primary care physicians often being reluctant to refer the patients for medical assessments are the key barriers they faced. In the last year, nearly 90% of respondents paid out of their own pocket for visiting a dentist, a gynecologist, a cardiologist and an ophthalmologist. The average cost of a specialized service, as declared by the interviewees, varied in the range of PLN 200 to PLN 400.

## Summary

When discussing rural women's health, it must be recorded that Poland offers a number of different healthcare campaigns and programs dedicated to women. The ample literature on health and preventive healthcare clearly suggests that an adequate, informed social campaign is the only way to reach the widest possible audience. Women who take care of their health seek to have regular preventive checkups, because this is the only professional remedy against a number of diseases, including those of affluence. The study provides grounds for concluding that the respondents have undergone some key checkups within the last year in order to monitor their health status, such as cytology or breast and thyroid ultrasound testing. However, another finding is that over 90% of interviewees paid for these examinations out of their own pocket, and thus did not use the services offered under the National Health Fund. Nevertheless, women can be observed to rely on the National Health Fund when it comes to basic checkups, such as CBC, urinalysis and chest radiograph. Public healthcare is a major barrier to accessing preventive testing for women. The study also identified extremely long waiting times (especially when it comes to specialized doctors) as another crucial obstacle.

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