

IWONA BOJAR<sup>1</sup>, TOMASZ HOLECKI<sup>2</sup>, LESZEK WDOWIAK<sup>1</sup>

## Dostępność opieki zdrowotnej w regionie lubelskim i śląskim w opinii pacjentek ze zdiagnozowaną patologią szyjki macicy

## Availability of health care in the Regions of Lublin and Katowice in opinions of patients with diagnosis of pathology of uterine cervix

### Streszczenie

**Cel.** Celem pracy było porównanie opinii na temat dostępności do opieki ginekologiczno-położniczej w regionie lubelskim i śląskim wśród pacjentek ze stwierdzoną patologią szyjki macicy.

**Materiał i metody.** Badanie przeprowadzono w 2009 roku. Wybrano losowo pacjentki ze stwierdzoną patologią szyjki macicy, które zostały skierowane do dalszej diagnostyki i leczenia do oddziałów ginekologicznych. Narzędziem badawczym był kwestionariusz ankiety. W badaniu wzięło udział 142 pacjentki z województwa lubelskiego i 162 pacjentki ze Śląska. Wyniki badań poddano analizie statystycznej.

**Wyniki.** Stwierdzono istotną różnicę pomiędzy regionem lubelskim i śląskim w ocenie dostępności do opieki ginekologicznej przez pacjentki. W obu regionach dostępność została oceniona na poziomie średnim, niemniej w województwie lubelskim pacjentki oceniły ją lepiej niż w województwie śląskim. Większość pacjentek wskazuje odległe terminy wizyt jako główny problem utrudniający dostęp do opieki ginekologicznej. Na wizytę do ginekologa pacjentki czekają najczęściej od kilku dni do miesiąca. Czas oczekiwania na odbiór wyniku cytologicznego wynosi od tygodnia do miesiąca od wykonania badania. Nie zaobserwowano różnic regionalnych w tym zakresie. Na Śląsku pacjentki szybciej otrzymują skierowanie do diagnostyki szpitalnej, ale dłużej czekają na przyjęcie do szpitala w porównaniu do pacjentek z Lubelszczyzny.

**Wnioski.** O dość dobrym dostępie do procedur diagnostyczno-leczniczych związanych z rozpoznanymi patologiami szyjki macicy świadczy krótki czas jaki upływa od badania cytologicznego do rozpoczęcia leczenia. Niezbędne jest opracowanie programu ogólnopolskiego, który zachęci kobiety do regularnych badań profilaktycznych w kierunku raka szyjki macicy.

**Słowa kluczowe:** dostępność opieki medycznej, badanie cytologiczne, patologia szyjki macicy.

### Summary

**Aim.** The objective of the study was the comparison of opinions of patients with the diagnosis of uterine cervix pathology concerning the availability of gynaecological-obstetric care in the Regions of Lublin and Katowice.

**Material and methods.** The study was conducted in 2009, and covered randomly selected patients with the diagnosis of uterine cervix pathology, who had been referred to gynaecological wards for further diagnostics and treatment. The research tool was a questionnaire form. The participants of the study were 142 patients from the Lublin Region and 162 patients from the Silesian Region. The results obtained were subjected to statistical analysis.

**Results.** A significant statistical difference in patients' accessibility to care was observed between the Lublin and Silesian Regions. In both regions, the accessibility was evaluated as being on the mediocre level; however, patients in the Lublin Region evaluated it in more positive terms than in Silesia. The majority of patients indicated distant dates of appointments as the main problem hindering access to gynaecological care. Most often, patients waited for a visit to a gynaecologist from several days to one month. Cytological test results are available for a patient within one week to one month after the examination has been made. No regional differences were noted in this respect. In Silesia, patients received the referral to hospital diagnostics sooner; however, they waited longer for admission to hospital than patients from the Lublin Region.

**Conclusion.** Short time intervals between cytological tests and the beginning of treatment evidences a relatively good access to diagnostic-treatment procedures related with pathologies of the uterine cervix. It is necessary to develop a national project which would provide incentives for women to participate in prophylactic examinations for cervical cancer regularly.

**Key words:** availability of health care, cytological tests, pathology of the uterine cervix.

<sup>1</sup> Institute of Agricultural Medicine, Lublin

<sup>2</sup> Medical University of Silesia, Katowice

## INTRODUCTION

In all member states of the European Union regional differences are observed in the degree of economic and social development, which is reflected by the standard and quality of life of the inhabitants [1, 2]. Regional variation is also typical for Poland, and it is noteworthy that unfortunately the socio-political and economic transition even increased these disparities in the development of individual regions. This is evidently manifested by, among other things, varied unemployment rates, differences in socio-economic activity of the population, as well as in subjectively and objectively diagnosed living conditions, including access to health care.

According to the principles outlined in the World Health Declaration of 1998, 'satisfaction of the highest attainable standard of health is one of the fundamental rights of every human being'. The state of health of an individual is the precondition of physical and mental wellbeing and good quality of life. This is the measure of progress in the realisation of the idea of social coherence. In May 1998, the World Health Assembly passed the World Health Organization (WHO) European Region policy framework derived from the "Health-For-All Policy For the Twenty-First Century" – 'Health 21', which is currently realised and contains principal directions of activities in the area of health policy that should be considered by the member states. The targets contained in the document respond to experiences gained during the realisation of 'Health For All', taking into account regional variations and the natural possibility for the realisation of these targets being a combination of today's reality and future dreams. The document laid out 21 targets for improving health in the 21<sup>st</sup> century [3].

Target 1. 'Solidarity for health in the European Region' or 'diminishing the health gap between countries', assuming that the present disproportion in the state of health between the Member States of the European Region should be reduced by at least one third by the year 2020. According to Target 2, 'Equality in health' or reducing the health gap within countries', by 2020 health differences between socio-economic groups inside the countries should be reduced by one fourth in all member states, due to a significant improvement in the health status of the groups in an unfavourable position. Target 8, 'Reducing non-communicable diseases', states that by 2020 the population in the Region should have far better access to primary health care biased towards family and community, and supported by an adequate and efficient system of hospital care.

The systemic changes in health care in Poland haven't brought about the anticipated results. Hindered access to public health care, especially to highly specialist services, evokes social discontent and makes it impossible to obtain the desired health and economic benefits for an individual and for the state, because for patients, regaining of efficiency which would provide them with an opportunity to function normally at home, in occupational and social environment, renders impossible.

In Poland, cancer of the uterine cervix still remains a big problem, despite easy access to early diagnostics of pathological states preceding the development of cancer. Morbidity and mortality due to this type of cancer still remain high, which places Poland in an unfavourable position compared to other European countries. The project of an active cytological

screening, which has been realised since 2006 by the National Health Fund, is unsuccessful because only approximately 10% of patients who are eligible, participated in the programme.

The basis for the research undertaken by the authors is the assumption that the tasks of the public health care systems are the improvement of health of the population and the provision of equal access to health care [4-6].

## OBJECTIVE

The objective of the study was comparison of the opinions of patients with diagnosed pathology of uterine cervix, concerning availability of obstetric care in the Regions of Lublin and Katowice.

## METHODS

The study was conducted in 2009 in the Lublin and Silesian Regions, and covered randomly selected patients with the diagnosis of pathology of the uterine cervix (low-grade squamous intraepithelial lesions (LSIL), high grade squamous intraepithelial lesion (HSIL), cervical intraepithelial neoplasia (CIN)), who had been referred to gynaecological wards for further diagnostics and treatment. The research tool was an anonymous questionnaire form containing 63 questions, designed for the needs of the study. In the presented study, a comparable analysis is described basing on patients' replies to the questions pertaining to the availability of ambulatory and hospital care, and the evaluation of the causes responsible for hindered access to medical care in Poland. The participants comprised 142 patients from the Lublin Region and 162 patients from the Silesian Region.

The results obtained were subjected to statistical analysis. The correlation between two parameters were analysed by means of chi-square test for independence and chi-square test for independence with Yates' correction. The significance level was set at  $\alpha = 0.05$ .

## RESULTS

In the examined group of patients with the diagnosis of pathological changes concerning the uterine cervix, patients from the Silesian Region evaluated their health status in more negative terms, compared to those from the Lublin Region. The inhabitants of the Silesian Region more often evaluated their state of health as mediocre – 40.74%, compared to patients living in the Lublin Region – 28.17%. As many as 42.25% of respondents from the Lublin Region evaluated their health as good, while in the Katowice Region such an opinion was expressed by 14.82% of patients ( $p < 0.05$ ).

The development of cancerous diseases in the closest family was declared by 50.62% of patients from the Silesian Region and 29.58% of respondents from the Lublin Region ( $p < 0.05$ ).

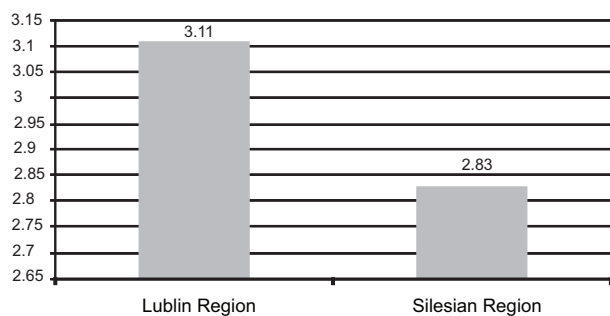
Similarly, in both regions, slightly more than a half of the patients had regular check-ups by a gynaecologist (Silesia – 54.32%, Lublin Region – 53.52%).

In the group of patients in the study, slightly more respondents from the Lublin Region had cytological test regularly performed (43.66%), compared to patients from the Katowice Region (29.63%); however, this difference was not statistically significant.

**TABLE 1. Characteristics of patients examined in the Regions of Lublin and Katowice.**

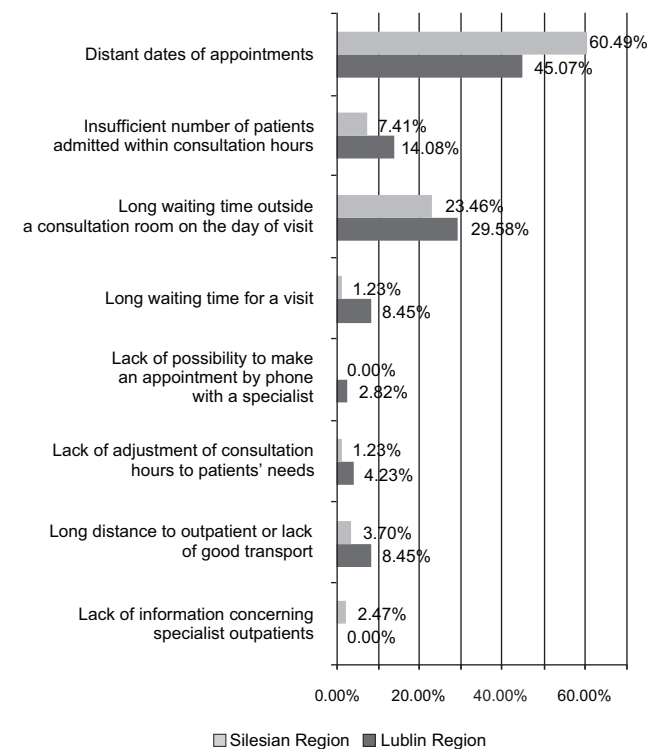
	Lublin Region		Silesian Region	
	N	%	N	%
Self-reported health				
Good	60	42.25	24	14.82
Rather good	36	25.35	36	22.22
Rather poor	40	28.17	66	40.74
Poor	6	4.23	18	11.11
Total	142	100.00	162	100.00
$\chi^2$ (p)	22.342 (<0.001)			
Development of cancerous diseases in the family				
Yes	42	29.58	82	50.62
No	100	70.42	80	49.38
Total	142	100.00	162	100.00
$\chi^2$ (p)	6.935 (<0.001)			
Regular visits to a gynaecologist				
Yes	76	53.52	88	54.32
No	66	46.48	74	45.68
Total	142	100.00	162	100.00
$\chi^2$ (p)	0.01 (NS)			
Regular performance of cytological tests				
Yes	62	43.66	48	29.63
No	80	56.34	114	70.37
Total	142	100.00	162	100.00
$\chi^2$ (p)	3.226 (NS)			

The respondents evaluated accessibility to care according to a 5-degree scale: 5 – definitely good; 4 – rather good; 3 – mediocre; 2 – rather poor; 1 – definitely poor. According to patients with the diagnosis of cervical cancer, the accessibility to gynaecological care in Poland is on a mediocre level. A statistically significant difference in patients' opinions concerning accessibility to care was observed between the discussed regions. Women living in the Lublin Region evaluated this accessibility in more positive terms (3.11) than those from the Silesian Region (2.83),  $p < 0.05$ .

**FIGURE 1. Evaluation of general accessibility to care ( $p < 0.05$ ).**

In both regions, the greatest problems for patients are distant dates of appointments with medical specialists (Lublin Region – 45.07%, Silesian Region – 60.49%), difficulties

in making an appointment with a gynaecologist, and a long time in the waiting room for consultation (Lublin Region – 29.58%, Silesian Region – 23.46%). In addition, patients from the Lublin Region experience difficulties associated with the small number of patients admitted by physicians within their consultation hours (14.08%), a long waiting time for a visit to a gynaecologist after registration (8.45%), and a long distance to an outpatient or lack of good transport (8.45%) (Table 2, Figure 2).

**FIGURE 2. Causes of difficulties in making an appointment with a gynaecologist.**

In both regions patients waited for a similar period of time to get an appointment with a gynaecologist. About half of the patients (Lublin Region – 52.11%, Katowice Region – 49.38%) got an appointment at a gynaecologist without waiting. In the Lublin Region, 1/4 of patients waited several days for an appointment, 12.68% of respondents waited longer than a week. In Silesia, nearly 1/5 of respondents waited several days or longer than a week for a visit to gynaecologist. Only 3-5% of the patients in the study waited longer than a month for an appointment with a specialist. All respondents had a cytological test performed during these visits.

In the Silesian Region, the patients received the results of cytological tests most frequently within one to two weeks (33.33%), and within two weeks to one month (34.57%) after making the test. In the Lublin Region, the patients received their test results most often within one to two weeks (33.80%), followed by up to one week (26.76%) and within two weeks to one month (23.94%).

In both the Lublin Region (54.93%) and Silesian Region (76.55%), once the gynaecologist received an abnormal cytological result, the patient was instantly referred for further hospital diagnostics. However, nearly 1/5 of respondents from the Lublin Region obtained the referral to hospital as late as at the second visit to a gynaecologist –  $p < 0.05$ .

**TABLE 2. Periods associated with the diagnostic process of pathology of the uterine cervix in an outpatient (ambulatory services) in the Regions of Lublin and Katowice.**

	Lublin Region		Silesian Region	
	N	%	N	%
Waiting time for a visit to gynaecologist				
Admitted instantly	74	52.11	80	49.38
Waited for several days	36	25.35	30	18.52
Longer than a week	18	12.68	28	17.28
About a month	10	7.04	16	9.88
Longer than a month	4	2.82	8	4.94
Total	142	100.00	162	100.00
$\chi^2$ (p)	2.187 (NS)			
Time which elapsed until the patient received the result of cytological test				
Within three days	18	12.68	24	14.81
Up to one week	38	26.76	20	12.35
Within one to two weeks	48	33.80	54	33.33
Within two weeks to one month	34	23.94	56	34.57
Longer than one month	4	2.82	8	4.94
Total	142	100.00	162	100.00
$\chi^2$ (p)	6.122 (NS)			
Referral from a doctor to further diagnostics in hospital after receipt of cytological test result				
Yes	78	54.93	124	76.55
No, referral obtained on the second visit	26	18.31	14	8.64
No, referral obtained from another physician	12	8.45	14	8.64
Others	26	18.31	10	6.17
Total	142	100.00	162	100.00
$\chi^2$ (p)	10.056 (<0.02)			

In Katowice Region, over 60% of patients waited for admission to a hospital, while in the Lublin Region 43.66% of respondents waited for admission to a hospital according to the order of registration –  $p < 0.05$ . In both regions analysed, less than 10% of the patients examined reported additional causes of delay in the time of admission to hospital (Table 3, Figure 3).

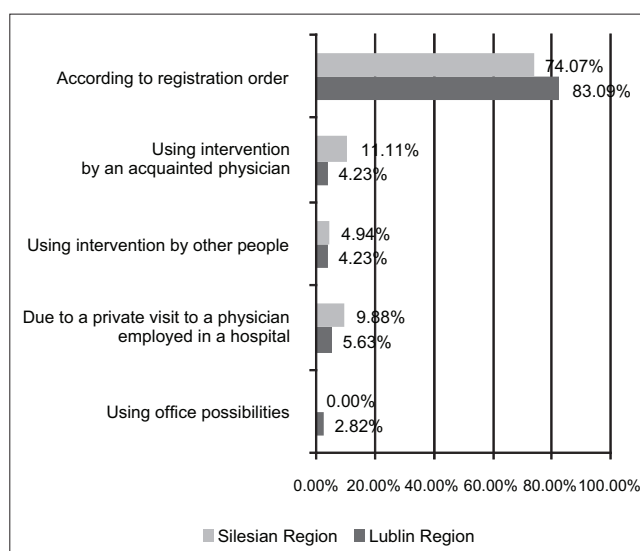
The majority of patients from both regions were admitted to hospital diagnostics according to the order of registration in a hospital (Lublin Region – 83.09%, Katowice Region – 74.07%). Approximately 10% each of respondents were admitted to hospital due to the intervention of an acquainted physician, or due to a private visit to a physician employed in a hospital.

## DISCUSSION

Reduction of morbidity and mortality due to cancerous diseases is one of the main challenges to health policy of all countries worldwide. Cervical cancer is the type of cancer which may be detected by means of a simple cytological test,

**TABLE 3. Problems associated with admission of a patient to hospital diagnostics in the Regions of Lublin and Katowice.**

	Lublin Region		Silesian Region	
	N	%	N	%
Necessity to wait in a queue for admission to hospital				
Yes	62	43.66	100	61.73
No	80	56.34	62	38.27
Total	142	100.00	162	100.00
$\chi^2$ (p)	4.961 (<0.05)			
Presence of causes of delaying admission to hospital in time				
Yes	14	9.86	16	9.88
No	128	90.14	146	90.12
Total	142	100.00	162	100.00
$\chi^2$ (p)	0.001 (NS)			

**FIGURE 3. In what way have you been admitted to a hospital?**

and is most frequently preceded by pre-cancerous changes, the treatment of which prevents further development of the disease. For this reason, as well as for economic reasons, this cancer should be diagnosed at early stages of its development. In the case of diagnosing pathological changes in a cytological test, the standard medical procedure is further histopathological diagnostics. Therefore, the availability to gynaecological ambulatory, and subsequently hospital care, is very important for patients with vivid changes in a cytological test. The presented study shows a significant difference in the accessibility to gynaecological care for patients in the Lublin and Katowice Regions. In both regions, the accessibility was evaluated as being on a mediocre level; however, the respondents from the Lublin Region reported higher evaluations than those from the Silesian Region.

The majority of patients indicated distant dates of appointments as the main problem hindering the access to care. Most often, patients wait several days to one month for a visit to a gynaecologist. A patient receives the result of the cytological test within one week to one month after performing the examination. No regional differences were observed in this respect.

In Silesia, patients obtained the referral to hospital diagnostics faster; however, they waited longer for admission to hospital, compared to respondents from the Lublin Region.

According to the studies conducted in 2008 by the Public Opinion Research Centre (CBOS), both favourable and unfavourable changes in evaluations of accessibility to medical specialists were noted compared to previous years. Deterioration was observed in evaluations concerning primarily consultations which had previously been difficult to obtain, i.e. consultations with a cardiologist and neurologist. In many cases, the time of waiting for a visit increased. It is relatively easy to obtain a consultation with a gynaecologist. No changes were noted concerning the type of difficulties most frequently encountered in access to services by medical specialists, while distant dates of appointments still remain the most important barrier in obtaining consultations with them. In 2008, the longest period of waiting was for a visit to a cardiologist – for over 40% of respondents the waiting time was longer than one month, for almost 1/5 – more than 3 months. Consultation with an allergologist occupies the subsequent position (nearly 2/5 of patients waited for this consultation longer than one month), followed by a neurologist and a rheumatologist, where in each case 1/3 of respondents waited for more than a month for a consultation. The relatively shortest waiting time was for a consultation with a laryngologist, gynaecologist, dentist and dermatologist – in the first two cases, over 3/4 of respondents did not wait for a visit at all, or waited not longer than two weeks; with respect to the last two, such a waiting time concerned 2/3 of patients [7]. In the reports published in Poland, accessibility to medical care according to regional differences has not been analysed.

The studies conducted by the author in 2003 in the Lublin Region focused on patients' evaluations of difficulties with admission to a selected consultation room, gynaecologist and hospital. Obtaining a gynaecological-obstetric consultation does not require a referral from a family physician, which eliminates this type of barrier mentioned with respect to other specialist consultations.

In the opinions of the patients examined, in 2003, accessibility to gynaecological-obstetric consultation rooms and to a hospital was good or even very good. Only 6% of respondents had difficulties with admission to a selected consultation room, and only three from among hospitalized women had difficulties with obtaining care in a selected hospital. As many as 76% of the population in the study mentioned certain difficulties in obtaining a consultation with a selected gynaecologist. According to respondents' opinions, a long waiting time in a queue for an appointment, too small number of patients admitted during a day, and distant appointment dates, are the most frustrating ones [8]. These results are consistent with the results of studies carried out among patients in Poznań concerning difficulties in obtaining a consultation with a specialist, which indicated

that patients most often complained of long queues waiting for a visit and limitations to admissions during the day [9].

The reports available did not present the analysis of the duration of the diagnostic process among patients with abnormal results of cytological test in Poland, which may be very important with respect to the planning of health policy and allocation of public funds designed for prophylaxis.

## SUMMING UP

Patients from the Regions of Lublin and Katowice evaluated accessibility to ambulatory and hospital gynaecological care as being on a mediocre level. Patients from the Lublin region have better access to gynaecological diagnostics and treatment. The difficulties in access to gynaecological care mentioned by patients are similar in both regions. Short periods of time elapsing from performance of cytological test to the beginning of treatment evidence a relatively good access to diagnostic-treatment procedures associated with the diagnosed pathologies of the uterine cervix. It is necessary to develop a national project which would provide incentives for women to perform regular prophylactic check-ups for cervical cancer.

## REFERENCES

1. Pierce CA, Hanks RA. Life satisfaction after traumatic brain injury and the World Health Organization model of disability. *Am J Phys Med Rehabil.* 2006 Nov; 85(11):889-98.
2. World Health Organization. The World Health Report 2000. Health systems: improving performance. WHO, Geneva 2000.
3. Zdrowie 21. Zdrowie dla wszystkich w XXI wieku. Centrum Systemów Informacyjnych Ochrony Zdrowia. Warszawa-Kraków: Fundacja Zdrowia Publicznego; 2001.
4. Aaron KF, Chesley FD Jr. Beyond rhetoric: what we need to know to eliminate disparities. *Ethn Dis.* 2003;13 Suppl 3: 3-11.
5. Hurley J. Ethics, economics, and public financing of health care. *J Med Ethics.* 2001;27:234-9.
6. Chang WC. The meaning and goals of equity in health. *J Epidemiol Comm Health.* 2002;56:488-91.
7. Dostępność świadczeń zdrowotnych w opinii Polaków. Warszawa: Centrum Systemów Informacyjnych Ochrony Zdrowia. Zakład Analiz Socjologicznych; 2008.
8. Bojar I, Wdowiak L, Miotła P, Strzemecka J. Satysfakcja pacjentek z usług publicznych i niepublicznych poradni ginekologiczno-położni-czych na terenie miasta Lublina. *Zdr Publ.* 2006;116(1):189-91.
9. Borkowska-Kalwas T, Pączkowska M. Niektóre aspekty dostępności usług medycznych. *Antidotum.* 1997;9:38.

## Informacje o Autorach

Dr n. med. IWONA BOJAR – Krajowe Obserwatorium Zdrowia i Bezpieczeństwa Pracowników Rolnictwa, Instytut Medycyny Wsi w Lublinie; dr n. hum. TOMASZ HOŁECKI – kierownik, Zakład Ekonomiki Zdrowia, Śląski Uniwersytet Medyczny; prof. dr hab. n. med. LESZEK WDOWIAK – dyrektor, Instytut Medycyny Wsi w Lublinie.

## Adres do korespondencji

Dr n. med. Iwona Bojar  
Instytut Medycyny Wsi  
ul. Jaczewskiego 2  
20-090 Lublin, Poland