

Population of Polish patients participating in the Heart Failure Pilot Survey (ESC-HF Pilot)

Barbara Sosnowska-Pasiarska¹, Radosław Bartkowiak¹, Beata Wożakowska-Kapłon^{1,2},
Grzegorz Opolski³, Piotr Ponikowski⁴, Lech Poloński⁵, Roman Szelemej⁶, Zdzisław Juszczak⁷,
Ewa Mirek-Bryniarska⁸, Jarosław Drożdż⁹

¹1st Clinical Department of Cardiology, Swietokrzyskie Centre of Cardiology, Kielce, Poland

²Faculty of Health Sciences, Jan Kochanowski University in Kielce, Poland

³1st Chair and Department of Cardiology, Medical University of Warsaw, Warsaw, Poland

⁴Department of Cardiac Diseases, Wrocław Medical University, Wrocław, Poland

⁵3rd Chair and Clinical Department of Cardiology, Medical University of Silesia, Zabrze, Poland

⁶Cardiology Unit, Sokolowski Specialist Hospital, Walbrzych, Poland

⁷Saint Elzbieta Hospital, Biała, Poland

⁸Cardiology Unit, Josef Dietl Specialist Hospital, Cracow, Poland

⁹Department of Cardiology and Cardiac Surgery, Medical University of Lodz, Lodz, Poland

Abstract

Background: Heart failure (HF) is currently one of the main causes of cardiovascular mortality. In order to collect current epidemiological data on patients with HF, the Heart Failure Pilot Survey (ESC-HF Pilot) registry was initiated.

Aim: Primary objective of the study was to compare clinical epidemiology of outpatients and inpatients with HF and investigate currently used diagnostic and therapeutic modalities in Poland and 11 other European countries.

Methods: The ESC-HF Pilot Survey study was a prospective multicentre observational registry conducted in 2009–2011 in 136 cardiology centres in 12 European countries selected to represent different health systems and care attitudes across Europe. All outpatients with HF and patients admitted due to acute decompensated HF were included into the registry during the enrolment period (1 day per week for 8 consecutive months). Researchers completed detailed medical data questionnaires for all HF patients recruited to the study.

Results: In all participating centres across Europe, 6108 patients were recruited, including 1159 patients from Poland (19% of the survey population). The majority of Polish participants were admitted due to acute HF (73%), while ambulatory chronic HF patients predominated in the remaining European centres (69%). Polish patients develop HF at a younger age compared to other European countries (proportion of patients above 65 years: 54 vs. 65%, respectively) and they are more severely ill (NYHA class III: 44 vs. 34%, respectively; NYHA class IV: 18 vs. 11%; mean BNP level 910 vs. 773 pg/mL). Angiographically documented coronary artery disease was the major aetiology of HF in Poland (39 vs. 33%) which explains a higher rate of invasive revascularisation procedures in the Polish population (13 vs. 7%). In Poland, therapy with implantable cardioverter-defibrillators was used more frequently during the initial hospitalisation (7 vs. 4%), but the rate of cardiac resynchronisation therapy device implantation was smaller than in other European countries (4 vs. 7%). Drug therapy used in our country was comparable to the rest of Europe, except for more frequent use of aldosterone antagonists. Despite significant differences in the clinical characteristics seen between Polish and other European patients participating in the ESC-HF Pilot study, mortality at 3 months did not differ between Polish and other European centres (2.5 vs. 3%).

Conclusions: The ESC-HF Pilot Survey findings indicate a very high standard of inpatient HF treatment but at the same time unsatisfactory current ambulatory HF therapy in Poland.

Key words: heart failure, epidemiology, mortality

Kardiol Pol 2013; 71, 3: 234–240

Address for correspondence:

Barbara Sosnowska-Pasiarska, MD, 1st Clinical Department of Cardiology, Swietokrzyskie Centre of Cardiology, ul. Grunwaldzka 45, 25–736 Kielce, Poland, e-mail: repikus@poczta.onet.pl

Received: 08.06.2012 Accepted: 21.11.2012

Copyright © Polskie Towarzystwo Kardiologiczne

INTRODUCTION

Heart failure (HF) is currently one of the main causes of cardiovascular (CV) mortality. Despite advances in the treatment of CV disease, incidence and prevalence of HF in the general population continues to rise. This is related to aging of the population, effective treatment of CV disease leading to an extended life span of patients with these diseases, but also long-term complications of successfully treated acute disease, such as post-infarction myocardial remodelling. People with symptomatic or asymptomatic HF are currently estimated to account for about 4% of the European population. The prevalence of HF in the adult population is about 2–3% but rises sharply above 75 years of age, reaching as much as 10–20% among septa- and octogenarians [1]. Coronary artery disease leads to myocardial dysfunction and remains the most common cause of symptomatic HF, present in up to 70% patients with this clinical syndrome [2]. Chronic HF is associated with large mortality and significant impairment of quality of life. It also places a significant economic burden on the healthcare system, generating large costs of both outpatient and inpatient care. The characteristics of HF patients treated by primary care physicians in Poland was described in the ZOPAN study which focused on patient health status, quality of care, and healthcare system burden [3]. In the United States, more than 1 million patients are hospitalised annually due to acute decompensated HF, and the number of HF hospitalisations was estimated to be similar in Europe [4]. Despite treatment advances, both short- and long-term outcomes remain poor, with about 50% of patients with symptomatic HF dying within 4 years, and 40% of hospitalised patients die or are readmitted within 1 year. Acute decompensated HF is the cause of 5% of all acute hospital admissions, occurs in 10% of hospitalised patients, and accounts for about 2% of all healthcare costs, mostly due to hospitalisations [5]. In order to collect current epidemiological data on patients with HF in the European countries and compare currently used diagnostic and therapeutic modalities, the Heart Failure Pilot Survey (ESC-HF Pilot) registry was initiated by the Heart Failure Association of the European Society of Cardiology [6]. This registry allowed evaluation of the organisational structure of long-term HF patient care in the European countries. In addition, previous American registry data indicate that participation in such a registry may lead to improvement in the quality of care and outcomes in HF patients in the participating centres [7].

The purpose of the present study was to characterise Polish HF patients and investigate diagnostic and therapeutic modalities currently used in this patient group in Poland in comparison to other European countries, so as to optimise management in this population.

METHODS

The ESC-HF Pilot registry was a multicentre prospective observational study conducted in 2009–2011 in 136 cardiology centres in 12 European countries (Austria, Denmark, France,

Germany, Greece, Italy, the Netherlands, Norway, Poland, Romania, Spain, and Sweden) representing different health systems and care attitudes across Europe. Registry participation was approved by national cardiac societies which selected centres at varying reference levels, taking into account their different diagnostic and therapeutic capabilities, so as to obtain as representative European patient population. The number of participating national centres depended on the country population (1 centre per 2 million inhabitants). Among 25 centres, 5 should have cardiac surgical facilities, 8 should have a cardiac catheterisation laboratory and/or be capable to institute treatment with implanted cardioverter-defibrillators (ICD) and cardiac resynchronisation therapy (CRT), and 12 should be non-interventional cardiology units. All outpatients with HF and patients admitted due to acute decompensated HF were included into the registry during the enrolment period (1 day per week for 8 consecutive months from October 2009 till May 2010). For all patients, an entry questionnaire was completed that included patient clinical status, aetiology of HF, biochemical parameters, and drug therapy used before and after inclusion into the study. During follow-up at 3, 6, and 12 months (either patient visit in the hospital or cardiology/HF clinic, or telephone interview), patient clinical status, hospitalisations for cardiac and non-cardiac reasons, selected biochemical parameters, and drug therapy were evaluated.

RESULTS

Clinical characteristics of the recruited patients

From October 2009 till May 2010, overall 6108 patients were recruited into the registry in Europe, including 1159 patients in Poland (19% of all patients recruited into the study). Among these Polish patients, 44% were recruited in centres with cardiac surgical facilities, 30% in centres with a cardiac catheterisation laboratory and/or capable to institute ICD/CRT treatment, and 26% in non-interventional cardiology units. In other European countries, the majority of participants were outpatients (68.7%), while most patients recruited in Poland were hospitalised due to worsening of chronic HF or acute HF (73%). The mean age of patients recruited in centres in Poland was 66 years compared to 70 years in the remaining 11 European countries but this difference was not significant. In contrast, the proportion of patients above 65 years age was significantly lower in Poland compared to the other European countries (54.0% vs. 65.5%, $p < 0.05$). Similarly to other European countries, men were significantly more frequently recruited into the registry in Poland. No significant differences in body mass index were found. Vital signs such as blood pressure and heart rate were similar in the Polish HF cohort and in the other European countries. In the ESC-HF Pilot registry, atrial fibrillation (AF) and diabetes were present in a similar proportion of patients regardless of the geographical location. Among the Polish patients, antihypertensive drug therapy was more frequently used prior to study inclusion ($p < 0.05$). The

Table 1. Baseline clinical characteristics of the ESC-HF Pilot registry participants in the Polish cohort and other European centres

	Polish centres (n = 1159)	Remaining European centres (n = 4949)	P
Hospitalised patients [%]	73	31	< 0.05
Mean age [years]	66 ± 13.17	70	NS
Male gender [%]	68	68	NS
Mean BMI [kg/m ²]	28 ± 5	27	NS
Mean SBP [mmHg]	130 ± 26.56	125	NS
Mean heart rate [bpm]	80 ± 24.49	72	NS
Smoking [%]	13	12	NS
Antihypertensive drug therapy before inclusion into the registry [%]	62	59	< 0.05
Atrial fibrillation [%]	42	41	NS
Diabetes [%]	34	31	NS
Pacemaker [%]	7	8	NS
ICD [%]	9	11	NS
CRT-D [%]	4	7	< 0.05
Chronic obstructive pulmonary disease [%]	13	16	NS
Chronic kidney disease [%]	20	21	NS
Cancer [%]	3	5	NS
Obstructive sleep apnoea syndrome [%]	3	4	NS
Depression [%]	4	8	< 0.05

BMI — body mass index; SBP — systolic blood pressure; ICD — implantable cardioverter-defibrillator; CRT-D — cardiac resynchronisation therapy-defibrillator

Polish cohort was less frequently treated with implantable devices, including pacemakers, ICD, and CRT devices, prior to study inclusion (21% vs. 27%, $p < 0.05$). This difference was related to a lower number of patients with an implanted CRT-defibrillator (CRT-D) device in the Polish HF cohort. Baseline clinical characteristics of patients recruited into the ESC-HF Pilot registry in 26 Polish centres and all remaining European centres are shown in Table 1. Angiographically documented coronary artery disease was the most common cause of HF both in Poland and in the remaining European countries (39% vs. 33%, $p < 0.05$). Table 2 shows aetiology of HF in patients recruited into registry.

Advanced HF as evaluated using the New York Heart Association (NYHA) functional classification was more frequently diagnosed initially in patients recruited into the registry in the Polish centres (Fig. 1). At baseline, NYHA class III HF was found in as many as 44% of patients in the Polish cohort compared to 34% of patients in the remaining European countries ($p < 0.05$), and NYHA class IV HF was present in 18% of patients recruited in Poland compared to 11% of patients recruited in the remaining European centres ($p < 0.05$). These statistically significant differences in the severity of HF between the Polish cohort and the remaining European patients were clearly related to a higher proportion of patients hospitalised due to acute decompensated HF among the Polish study participants.

Table 2. Aetiology of heart failure in the ESC-HF Pilot registry in the Polish cohort and other European centres

Aetiology	Poland [%]	Europe [%]	P
Angiographically documented coronary artery disease	39.2	32.5	< 0.05
Non-angiographically documented coronary artery	15.6	9.1	NS
Arterial hypertension as the main independent cause of myocardial dysfunction and heart failure	11.2	12.7	NS
Dilated cardiomyopathy	15.2	25.5	< 0.05
Valvular heart disease	11.3	9.9	NS
Tachyarrhythmic cardiomyopathy	1.4	2.2	NS

Most patients recruited into the registry were previously hospitalised due to acute decompensated HF (57% of patients both in the Polish cohort and the remaining European centres). A history of myocardial infarction was frequently noted among the Polish participants ($p < 0.05$). Myocardial revascularisation by percutaneous coronary intervention (PCI) was previously performed in 27% of patients in the Polish cohort compared

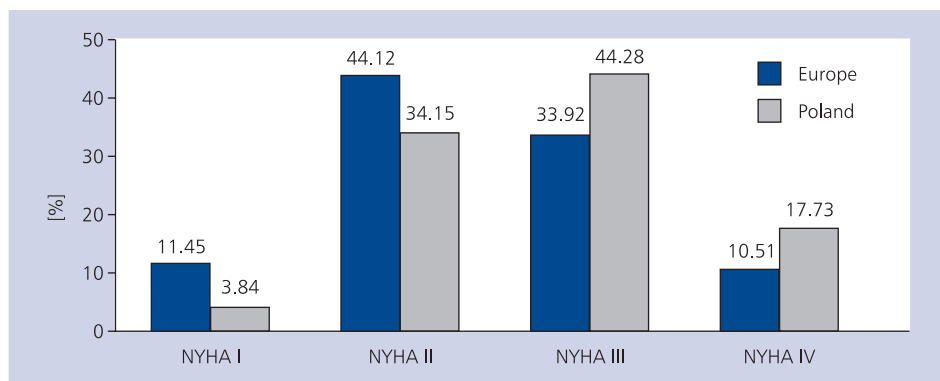


Figure 1. Initial heart failure severity as assessed using the New York Heart Association (NYHA) functional classification

Table 3. Previous acute cardiovascular events and interventions prior to inclusion into the ESC-HF Pilot registry in the Polish cohort and other European centres

Medical history data	Poland [%]	Europe [%]	P
Previous hospitalisation due to heart failure	57	57	NS
Previous myocardial infarction	55	38	< 0.05
Previous percutaneous coronary intervention	27	19	< 0.05
Previous coronary artery bypass grafting	13	13	NS
Previous stroke	11	10	NS
Previous valvular heart disease surgery	9	8	NS

to 19% patients in the remaining European centres. Coronary artery bypass grafting (CABG) was previously performed in about 13% of patients recruited into the registry regardless of the geographical region. Prior to study inclusion, valvular heart disease surgery was performed in 9% of patients in the Polish cohort compared to 8% patients in the remaining European centres. Data regarding previous acute CV events and interventions prior to inclusion into the ESC-HF Pilot registry are shown in Table 3.

Biochemical test and imaging methods in the study population

More severe HF in the Polish patients as reflected by the NYHA class was also associated with a significantly higher B-type natriuretic peptide (BNP) level at baseline compared to the remaining European centres ($p < 0.05$). However, the proportion of Polish study participants for whom BNP data were available was very low (6.7%). Patients recruited

into the registry in Poland more frequently underwent both echocardiography and invasive coronary angiography during the index hospitalisation. The latter examination was performed in 31% of hospitalised patients recruited into the registry in Poland compared to 19% of patients in the remaining European centres. In addition, the Polish participants more frequently underwent coronary revascularisation procedures.

PCI or CABG was performed in 13% of Polish patients hospitalised due to HF compared to 7% of patients in the remaining European countries. More frequent use of invasive investigations is also evidenced by a twofold higher proportion of patients who underwent right heart catheterisation in the Polish centres (6% vs. 3%, $p < 0.05$). No significant differences in the rate of CRT use (during the index hospitalisation and after inclusion into the registry) were noted between various European regions. In contrast, the Polish participants more frequently underwent ICD implantation already during the index hospitalisation (7% vs. 4%, $p < 0.05$) (Table 4). These differences in the rates of in-hospital invasive procedures might have reflected the fact that the Polish participants presented with more severe HF and were less frequently investigated and optimally treated prior to the inclusion to the registry, which may be related to limited availability of outpatient tertiary care cardiology facilities in Poland. More frequently compared to other European countries, patient selection for invasive procedures (pacemaker, ICD, or CRT-D implantation) was performed during the index hospitalisation due to acute decompensated HF and not on an outpatient basis. These differences might have been related to different models of cardiac care in the participating European countries.

Among patients hospitalised due to acute decompensated HF, in-hospital mortality was 3.8%. CV events were the most common cause of in-hospital deaths (90.1%). On-treatment heart rate was insufficiently reduced as per the current guidelines both in the Polish cohort and among patients in the other European centres (mean 72 bpm) [1]. In contrast, systolic blood pressure was normalised in most hospitalised patients (mean 130 mm Hg). These findings indicate the

Table 4. Selected laboratory parameters and invasive procedures in patients included into the ESC-HF Pilot registry in the Polish cohort and other European centres

In-hospital investigations and treatment	Polish centres (n = 1159)	Remaining European centres (n = 4943)	P
Mean BNP level [pg/mL]	910 ± 408	773	NS
Haemoglobin level [g/dL]	13	12	NS
Creatinine level [mg/dL]	1.09	1.18	NS
Sodium level [mEq/L]	138	139	NS
Echocardiography [%]	89	80	< 0.05
Coronary angiography [%]	31	19	< 0.05
Revascularisation [%]	13	7	< 0.05
Right heart catheterisation [%]	6	3	< 0.05
CRT [%]	3	4	NS
ICD [%]	7	4	< 0.05

BNP — B-type natriuretic peptide; ICD — implantable cardioverter-defibrillator; CRT — cardiac resynchronisation therapy

need for optimal drug selection and dosing that would allow obtaining recommended target on-treatment blood pressure values, and particularly heart rate. Of note, hospitalised patients in the Polish cohort were significantly less frequently discharged with AF as the main heart rhythm (27% vs. 40%, $p < 0.05$). As the initial prevalence of AF was similar in all participating centres (about 40%), it follows that the heart rhythm control strategy was likely used more frequently in the Polish centres. Drug therapy used in our country was comparable to the rest of Europe, except for more frequent use of aldosterone antagonists. Detailed evaluation of drug therapy used in HF patients included into the ESC-HF Pilot registry will be a subject of a separate analysis.

Follow-up at 3 months

In the Polish centres participating in the ESC-HF Pilot registry, most follow-up visits occurred in a hospital and were performed by a cardiologist or internist. In the other European centres, follow-up visits at 3 months after a hospitalisation due to HF were performed by nurses in specialised HF clinics. In the Polish cohort, mortality at 3 months was 2.5%, similar to mortality observed in the remaining European centres (3%).

DISCUSSION

Analysis of the data collected in the participating Polish cardiac centres caring for patients with acute and chronic HF leads to the following conclusions: patients in Poland develop HF at a younger age, and they more frequently require hospitalisation due to both insufficient availability of specialist outpatient care and more advanced disease. Patients included into a large American national OPTIMIZE-HF registry were also older compared to Polish patients in our cohort [8]. The current registry indicates significant organisational differences regarding care for patients with HF in Poland and 11 other European countries. The participating centres in various countries were not selected randomly, which might have affected the registry findings. One limitation of an observational registry is a possible difference in the reference level of the participating centres between various countries, which might have affected the clinical profile of the recruited patients and their care. The study findings and observed differences between the participating centres were also affected by the fact that the registry included both outpatients and inpatients. Most HF patients in Poland gain access to specialist investigations and care only during hospitalisation. Both invasive and drug therapy is initiated or performed during the hospital stay and only rarely it is later modified on an outpatient basis by primary care physicians. Drug therapy in patients in HF is optimised by specialist cardiology clinics, but as their number and availability are limited in Poland, most patients are generally cared for by family physicians. Numerous concomitant diseases, advanced age, and limited mobility are additional factors limiting easy access to specialist care.

The results in the Polish cohort of the registry indicate the need to create specialised clinics providing comprehensive evaluation, care, and rehabilitation for patients with HF [9]. Such clinics would also facilitate HF patient selection for invasive treatment, particularly with implanted electrotherapy devices [10]. The number of device implantations in patients with chronic HF is still insufficient in view of current recommendations and guidelines. The proportion of patients below 65 years included into the registry was significantly higher in Poland. Development of HF at a younger age in the Polish population may reflect inadequate prevention and suboptimal treatment of diseases leading to this clinical syndrome. In Poland, a higher proportion of patients undergo evaluation and coronary revascularisation compared to the other 11 European countries participating in the registry. This indicates that a network of cardiac catheterisation laboratories in our country is well organised and provides widely available services for patients who require such treatment. In the Polish cohort, echocardiography which can be considered a necessary investigation in the evaluation of HF was performed more frequently compared to the other European countries. This was probably related not only to the availability of such

services but also to the fact that the Polish cohort mostly included hospitalised HF patients.

An important component of HF patient care is nursing care and family support in daily activities. Patient cooperation with a specialist HF nurse likely improves patient compliance [11, 12]. An effective cardiac rehabilitation network is also an important part of the patient management, leading to improved fitness and overall clinical status of HF patients. It should be noted that the availability of selected diagnostic procedures in patients with HF in Poland was a subject of previous studies and evaluations, and proposals of detailed solutions on how to provide comprehensive care for HF patients were offered on many occasions under the National Programme for Prevention and Treatment of Cardiovascular Disease (POLKARD) [13].

CONCLUSIONS

The healthcare system directed at patients with HF in Poland requires organisational changes, with a focus on outpatient care, creating a network of specialised HF clinics selecting patients for invasive treatment and electrotherapy, and a network of rehabilitation clinics for HF patients. The ESC-HF Pilot Survey findings indicate a very high standard of inpatient HF treatment but at the same time unsatisfactory current ambulatory HF therapy in Poland.

Conflict of interest: none declared

References

- McMurray JJV, Adamopoulos S, Anker SD et al. Guidelines for the diagnosis and treatment of acute and chronic heart failure. *Eur Heart J*, 2012; doi:10.1093/eurheartj/ehs104.
- Fox KF, Cowie MR, Wood DA et al. Coronary artery disease as the cause of incident heart failure in the population. *Eur Heart J*, 2001; 22: 228–236.
- Rywik TM, Kołodziej P, Targoński R et al. Characteristics of the heart failure population in Poland: ZOPAN, a multicentre national programme. *Kardiologia Polska*, 2011; 69: 24–31.
- Gheorghade M, Zannad F, Sopko G et al. Acute heart failure syndromes: current state and framework for future research. *Circulation*, 2005; 112: 3958–3968.
- Stewart S, Jenkins A, Buchan S et al. The current cost of heart failure to the National Health Service in the UK. *Eur J Heart Fail*, 2002; 4: 361–371.
- Maggioni AP, Dahlstrom U, Filippatos G et al. EURObservational Research Programme: The Heart Failure Pilot Survey (ESC-HF Pilot). *Eur J Heart Fail*, 2010; 12: 1076–1084.
- Fonarow GC. Improving quality of care and outcomes for heart failure: role of registries. *Circ J*, 2011; 75: 1783–1790.
- Fonarow GC, Abraham WT, Albert NM et al. Influence of a performance-improvement initiative on quality of care for patients hospitalized with heart failure: results of the Organized Program to Initiate Lifesaving Treatment in Hospitalized Patients With Heart Failure (OPTIMIZE-HF). *Arch Intern Med*, 2007; 167: 1493–1502.
- Fonarow GC, Albert NM, Curtis AB et al. Associations between outpatient heart failure process-of-care measures and mortality. *Circulation*, 2011; 123: 1601–1610.
- Fonarow GC, Albert NM, Curtis AB et al. Improving evidence-based care for heart failure in outpatient cardiology practices: Primary results of the Registry to Improve the Use of Evidence-based Heart Failure Therapies in the Outpatient Setting (IMPROVE HF). *Circulation*, 2010; 122: 585–596.
- Heidenreich PA, Lewis WR, LaBresh KA et al. Hospital performance recognition with the Get With The Guidelines Program and mortality for acute myocardial infarction and heart failure. *Am Heart J*, 2009; 158: 546–553.
- Fonarow GC, Heywood JT, Heidenreich PA et al.; ADHERE Scientific Advisory Committee and Investigators. Temporal trends in clinical characteristics, treatments, and outcomes for heart failure hospitalizations, 2002 to 2004: Findings from Acute Decompensated Heart Failure National Registry (ADHERE). *Am Heart J*, 2007; 153: 1021–1028.
- Wizner B, Dubiel JS, Opolski G et al. Dostępność wybranych procedur diagnostycznych w zakresie opieki nad pacjentem z niewydolnością serca w Polsce: POLKARD 2005. *Kardiologia Polska*, 2010; 68: 265–272.

Polscy chorzy w rejestrze Europejskiego Towarzystwa Kardiologicznego: *The Heart Failure Pilot Survey (ESC-HF Pilot)*

Barbara Sosnowska-Pasiarska¹, Radosław Bartkowiak¹, Beata Wożakowska-Kapłon^{1, 2}, Grzegorz Opolski³, Piotr Ponikowski⁴, Lech Poloński⁵, Roman Szelemej⁶, Zdzisław Juszczak⁷, Ewa Mirek-Bryniarska⁸, Jarosław Drożdż⁹

¹Kliniczny Oddział Kardiologii, Świętokrzyskie Centrum Kardiologii, Kielce

²Wydział Nauk o Zdrowiu, Uniwersytet Jana Kochanowskiego w Kielcach, Kielce

³I Katedra i Klinika Kardiologii, Warszawski Uniwersytet Medyczny, Warszawa

⁴Klinika Chorób Serca, Uniwersytet Medyczny im. Piastów Śląskich, Wrocław

⁵III Katedra i Oddział Kliniczny Kardiologii, Śląski Uniwersytet Medyczny, Zabrze

⁶Oddział Kardiologiczny, Specjalistyczny Szpital im. A. Sokolowskiego, Wałbrzych

⁷Szpital im. Św. Elżbiety, Biała

⁸Oddział Kardiologii, Szpital Specjalistyczny im. J. Dietla, Kraków

⁹Katedra Kardiologii i Kardiologii, Uniwersytet Medyczny w Łodzi, Łódź

Streszczenie

Wstęp: Niewydolność serca (HF) jest obecnie jednym z głównych powodów zgonów z przyczyn sercowo-naczyniowych. W celu ustalenia aktualnych danych epidemiologicznych dotyczących chorych z HF przeprowadzono rejestr *The Heart Failure Pilot Survey (ESC-HF Pilot)*.

Cel: Celem niniejszej pracy było porównanie etiologii, profilu klinicznego oraz diagnostyki i leczenia pacjentów z HF w Polsce i pozostałych krajach europejskich.

Metody: Rejestr *ESC-HF Pilot* był wieloośrodkowym prospektywnym badaniem obserwacyjnym prowadzonym w latach 2009–2011 w 136 ośrodkach kardiologicznych, w 12 państwach europejskich, reprezentujących różne systemy i modele opieki zdrowotnej. Do rejestru włączano chorych z HF leczonych ambulatoryjnie i hospitalizowanych z powodu ostrej HF w czasie okresu rekrutacji do badania (1 dzień w tygodniu przez 8 kolejnych miesięcy). Badanie opierało się na wypełnieniu ankiety dotyczącej szczegółowych danych medycznych osób zgłaszających się z powodu HF do poszczególnych ośrodków.

Wyniki: Do rejestru włączono 6108 pacjentów, w tym 1159 z Polski (19%). W Polsce większość stanowili chorzy hospitalizowani z powodu HF (73%), natomiast w pozostałych ośrodkach europejskich przeważali pacjenci leczeni ambulatoryjnie (69%). Polscy chorzy zapadają na HF w młodszym wieku niż pacjenci w pozostałych krajach (wiek > 65 lat; 54 vs. 65%) i chorują ciężiej (III klasa wg NYHA 44 vs. 34%; IV klasa wg NYHA 18 vs. 11%; BNP 910 vs. 773 pg/ml). Główną przyczyną HF u polskich pacjentów była choroba wieńcowa udokumentowana angiograficznie (39 vs. 33%). Dlatego istotnie większa była częstość zabiegów rewaskularyzacji wieńcowej w trakcie obserwacji (13 vs. 7%). U chorych w ośrodkach polskich istotnie częściej wykonywano implantację kardiowertera-defibrylatora już podczas pierwszej hospitalizacji (7 vs. 4%), natomiast rzadziej wszczepiano stymulatory resynchronizujące (4 vs. 7%). Farmakoterapia HF była podobna do innych krajów europejskich, poza istotnie częstszym stosowaniem antagonistów aldosteronu. Mimo istotnych różnic w charakterystyce klinicznej chorych włączonych do rejestru, nie zaobserwowano większej śmiertelności w obserwacji 3-miesięcznej polskich chorych w porównaniu z pozostałymi ośrodkami europejskimi (2,5 vs. 3%).

Wnioski: Wyniki rejestru *ESC-HF Pilot* wskazują na wysoki standard leczenia polskich chorych z HF w warunkach szpitalnych i niedostateczną jakość specjalistycznej opieki ambulatoryjnej, zarówno nad pacjentami zagrożonymi rozwojem HF, jak i tymi wymagającymi dalszego nadzoru po przebytych zaostreniu choroby.

Słowa kluczowe: niewydolność serca, epidemiologia, śmiertelność

Kardiologia 2013; 71, 3: 234–240

Adres do korespondencji:

dr n. med. Barbara Sosnowska-Pasiarska, I Kliniczny Oddział Kardiologii, Świętokrzyskie Centrum Kardiologii, Wojewódzki Szpital Zespolony, ul. Grunwaldzka 45, 25-736 Kielce, e-mail: repikus@poczta.onet.pl

Praca wpłynęła: 08.06.2012 r.

Zaakceptowana do druku: 21.11.2012 r.