The Specificity and Costs of Public Services in Cemetery Maintenance: A Case Study of Bydgoszcz City

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Abstract:

Purpose: The aim of the article is to show the specificity of the organization of places such as cemeteries on the example of this type of facilities in the city of Bydgoszcz.

Design/Methodology/Approach: The selection of this local government was deliberate. The research methods used by the authors in the work included: a study of the subject literature, an analysis of legal acts of various importance, a case study and the method of individual cases (collecting multi-faceted information regarding the studied case and then using it in the diagnosis of the studied phenomenon).

Findings: In the course of the research, the authors identified the main problems related to management in cemeteries, while cataloguing the activities that the facility administrator is obliged to perform. It also enabled the identification of costs and the determination of the "potential supply and demand for burial sites" by indicating the number of births and deaths. **Practical implications:** Bydgoszcz is the first city in Poland to have tested e-Payments in relation to the provision of public services. Since July 28, the Ministry of Digitization has been testing pilot e-Payments in the mObywatel mobile application. In relation to the current situation, this applies to the payment of property tax instalments. If the system should be assessed positively and turns out to be effective, other payments are to be implemented successively. Moreover, from October 1, 2020, pursuant to the agreement of the parties between the City of Bydgoszcz and Przedsiębiorstwo Zieleń Miejska Sp. z o. o. (City Greenery Company, Ltd.), the previous administrator of municipal cemeteries – the City – took over municipal cemeteries for independent administration. Therefore, the identification of costs and their determinants can be used by local authorities to determine fees for the provision of public services in the field of cemetery.

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Originality/Value: The authors present the possibilities of organizing burial places and the potential costs associated with its implementation. This will allow for rationalization of expenses related to this service, both for the relatives of the deceased person and for the local government unit. Land is of limited nature and therefore its management is becoming more and more expensive.

Keywords: Borough, cemetery, burial, public service, costs (fees).

JEL codes: H75, H76.

Paper type: Research article

1. Introduction

Cemetery maintenance is a category of technical services included in public services that are provided to every resident of Poland as meeting the collective needs of the community is one of the borough's own tasks (Legal Act, 1990; Zawicki *et al.*, 2004).

Therefore, this is a type of service in which cannot exclude anyone from its implementation. This also means that homeless or uninsured people will be provided with the service in the event of their death. If the deceased person has no relatives or the family decides not to bury a family member without giving a reason, this task is then taken over by social welfare centres operating in local governments.

The borough where the person was last registered is responsible for the funeral of a homeless person. The borough's own mandatory tasks include but are not limited to arranging a funeral for homeless people – and this takes place in a manner established by the borough, in accordance with the religion of the deceased (Legal Act, 2004). If the death occurred in another borough, the person may apply for reimbursement of the funeral costs from the borough where the person last lived. The local government unit then selects the entity that offers the lowest price for the burial.

A cemetery is considered to be an institutionally shaped section of land with a programmatic burial purpose. In relation to historical conditions, these places could have been: simple burial places (often organized in the context of needs during warfare or near battlefields), memorial gardens, family cemeteries located near manors or castles, local cemeteries or special places where famous people are buried.

There are hundreds of world cultural heritage sites in the world, including cemeteries and many buildings/monuments containing burial places (Kiss and Bassa, 2010). The issues of burial and the right to a grave are widely discussed in the legal subject literature (Żurek, 2021; Rudnicki, 1999; Romańska, 2020).

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The shape, size and location of a cemetery have always been influenced by religious, sanitary and epidemiological considerations, geographical location and the culture of the local community. Early Christianity took over the concept of the cemetery as an inviolable and sacred space from the Roman tradition, which is why the first Christian cemeteries emerged from the former pagan cemeteries. Already in the 3rd century, the Church placed them under the care of bishops and priests, thus creating a system of cemetery administration (Rydzewska, 2013).

However, it was only a few centuries later that cemeteries became sacred places protected by special immunities. They were also protected by the right of asylum. Since the 10th century, there has been a tendency to locate cemeteries within cities and close to churches. The Roman Council of 1059 gave them the status of "semi-sacred" and started placing a curse on people who desecrated them (Kolbuszewski, 1996).

In the legal-administrative context, a cemetery is a clearly separated, marked and defined area intended for burying the dead. As a rule, the graves present there are made in the customary visual form (Kubiak – Masternak, 2017). Cemeteries are therefore often perceived as monofunctional places of burial and mourning, and as an urban planning puzzle in the dynamically changing urban tissue (Säumel *et al.*, 2023).

The issue of burial is regulated by both state and church regulations (Żurek, 2021). The very name *burial*, i.e., burying the dead, is related to the place, unlike funeral which is associated with custom and ritual. Nowadays, the most common form of burial is entombing the body of the deceased in the ground in a coffin and cremation (also resomation) of the body (Sierpowska, 2021).

Cemeteries are not only burial places (Nordh and Evensen, 2018). Cemeteries are also an important element of the cultural heritage and green infrastructure in the urban landscape (Długoński *et al.*, 2022). For many years (or even decades or centuries), burial places located in green areas (parks, forests), e.g., near palaces or castles have turned into wildlife refuges. Access to those may be difficult or completely impossible due to water conditions or the current terrain.

However, in a densely populated and dynamically developing urban area, there is often difficulty designating space for this purpose. Land is an asset that no society can create more of. The climatic conditions and global warming mean that crisis situations, e.g. local flooding can be observed more and more frequently.

Then, there is the need to accept that a given place cannot be organized any differently due to the floodplain. While in smaller units, especially in rural areas, this problem occurs sporadically, the pressure for the use and transformation of land for housing needs is noticeable in urban areas. Moreover, due to the limitation that applies to the asset of land and changes in the culture and specificity of burial in

various religions, the issue of costs (their scale, frequency of payment and dynamics of changes) also arises.

In Poland, there are disproportions in the development of social infrastructure related to burials. The location, development possibilities, and quality of burial facilities (area, legal status) are determined by historical, cultural, legal and, increasingly often, economic considerations. In the years 1999-2019 - 48% of newly established cemeteries were located in rural areas. The vast majority of those, approximately 90% of the total number, have the status of municipal cemeteries (Długozima, 2020).

So far, existing discussions on public spaces have focused primarily on types of spaces such as squares and parks, with little attention paid to cemeteries (Grabalov and Nordh, 2022). In the current discussion on the organization of urban space, the need to include this topic is also increasingly noticed.

The research methods used by the authors in the work included: a study of the subject literature, an analysis of legal acts of various ranks (Acts and local laws), case study and the method of individual cases (collecting multi-faceted information regarding the studied case and then using it in the diagnosis of the studied phenomenon). The data obtained came from the Department of Greenery and Municipal Management of the City Hall in Bydgoszcz and mass statistics (Statistical Office in Bydgoszcz).

The etymology of the term *cemetery* comes from the Latin language (*coemeterium*: a place of sleep or rest) and means a place where deceased people are buried (Filarska and Pałka, 1979; Piszcz-Czapla, 2011). In Poland, the issues of establishing and maintaining cemeteries are regulated in the Cemeteries and Burial of the Dead Act.

In the currently adopted organizational and legal formula, it is assumed that municipal and religious cemeteries are the burial places for the deceased. Local government units are responsible for establishing, managing and expanding municipal cemeteries as part of their own tasks. The borough/city council decides on the establishment of such a facility, upon obtainment of the consent of the relevant sanitary inspector (Legal Act, 1959).

In Poland, the majority of cemeteries are religious in nature (Żurek, 2021). In the case of a religious cemetery, the relevant church authorities decide on its establishment or expansion. This may take place in the area designated for this purpose in the local development plan, also upon obtainment of the consent of the relevant sanitary inspector.

Maintenance and management of municipal cemeteries remain the responsibility of mayors or city presidents, while religious cemeteries are the responsibility of religious associations.

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Religious cemeteries differ from municipal cemeteries. Their primary purpose is to bury the bodies of deceased people who belonged to a given religion and to perform religious ceremonies. When there is no municipal cemetery in a given town, the management of a religious cemetery is obliged to enable the burial of the bodies of people who have acquired the right to burial (Janicki, 2014).

Within the administrative boundaries of the city of Bydgoszcz, there are 12 religious cemeteries with a total area of 68 hectares, where approximately 130,000 people are buried. There are approximately 5.5 thousand registered and available burial places, but their estimated number is believed to be higher. This is due to the fact that 20 years after the original burial, a given place can be designated as a burial place again.

2. Religious Cemeteries of Bydgoszcz Parishes and Municipal Cemeteries in the City of Bydgoszcz - List and Characteristics

Due to the assumptions of the article, issues related to the organization and functioning of religious cemeteries will not be considered in detail. However, in order to show the scale of needs and activities, basic information about them will also be presented synthetically.

There are 13 religious cemeteries located in the city of Bydgoszcz. These include:

- 1. New Parish Cemetery in Artyleryjska Street under the management of the Parish of St. Martin and Saint Nicholas, with an area of approximately 8 hectares. About 30,000 people were buried there. There are no vacancies.
- 2. Sacred Heart of Jesus Cemetery in Ludwikowo Street, under the management of the parish of the same name, established in 1920. Approximately 20,000 people were buried on an area of 8.5 hectares. There are no vacancies.
- 3. Holy Trinity Parish Cemetery in Lotników Street, built in 1933. Its area is approximately 4.2 hectares and approximately 4,000 people are buried there. There are no vacancies.
- 4. Bielawki Cemetery in St. K. Wyszyńskiego Street with an area of approximately 12 hectares, managed by the Parish of Saint Vincent de Paul. Approximately 35,000 people were buried in this cemetery.
- 5. Cemetery in Kossaka Street founded in 1923, under the management of the Parish of Our Lady of Perpetual Help, with an area of approximately 3.5 hectares. Approximately 6,000 people were buried there. No vacancies.
- 6. Cemetery in Toruńska Street, managed by the Parish of St. Joseph with an area of approximately 1.3 hectares. Approximately 2.7 thousand people were buried there. There are no vacancies.
- 7. Cemetery in Chojnicka Street, managed by the Parish of St. Anthony of Padua. Approximately 7.5 thousand people were buried on an area of approximately 2 hectares. There are no vacancies.

- 8. Cemetery in Kapliczna Street, managed by the Parish of St. Stanisław the Bishop. Approximately 3,100 people were buried on an area of approximately 2.5 hectares.
- 9. Evangelical Cemetery in Zaświat Street was handed over to the "Uniwersal" funeral company by the Evangelical-Augsburg community and opened for reburials in 1994. Approximately 4.5 thousand people were buried on an area of approximately 2.6 hectares.
- 10. Cemetery in Piastowa Street located in Fordon, under the management of the Parish of St. Nicholas. It covers an area of approximately 1.89 hectares, where approximately 3.6 thousand people were buried. There are no vacancies.
- 11. Cemetery in Cechowa Street in Fordon, under the management of the Parish of St. John with an area of approx. 1.33 hectares, where approx. 1,000 people were buried.
- 12. Cemetery in Tańskich Street, under the management of the Parish of the Mount Carmel Blessed Virgin Mary. Its area is approximately 4.25 hectares and approximately 1.5 thousand people are buried there.
- 13. Parish of St. Maximilian Kolbe in Osowa Góra the cemetery (direction Wojnowo) was built in 1987 with an area of approx. 5 hectares. Approximately 5,000 people were buried there. This facility is located outside the administrative boundaries of the city.

With regard to municipal cemeteries in the city of Bydgoszcz, the characteristics will be presented in a broader aspect, including the infrastructure elements that are important when calculating the costs of their maintenance and the fees incurred by the person who buries their loved ones and/or maintains the graves.

Detailed data on the total number of people buried in municipal cemeteries are presented in Table 1.

		Specification									
	Specyficity	Number of people buried	Number of reservations, unknown persons and persons with the right to burial	Number of graves	Number of photos						
1.	Wiślana Cemetery	38,394	494	27,686	56,591						
2.	Kcyńska Cemetery	8,563	196	5,642	10,928						
3.	Grunwaldzk a Cemetery	4,482	92	3,391	5,901						
4.	Lotników Cemetery	4,361	7	2,332	4,755						
5.	Ludwikowo Cemetery	1,971	0	1,258	2,560						

 Table 1. Number of people buried in municipal cemeteries in Bydgoszcz (in total)

Source: Authors' own study based on data obtained from the City Hall in Bydgoszcz.

The characteristics of the objects included in Table 1 are presented below. They include:

- 1. The municipal cemetery in 22 Wiślana Street established in 1986:
 - a. the area of 23.77 hectares, 7 walls of columbaria (8,287 m², additionally two double walls for urns with ashes with a total number of 276 urn spaces), the area of internal paved roads is 19,949 m², the area of external paved roads is approx. 800 m² from the entrance gate to the gate located opposite the school in Wiślana Street.
 - b. water intakes: 14 own pumps, waterworks 25 taps,
 - c. funeral home:
 - total area of 773 m², single-story building with 38 rooms:
 - 2 ceremonial rooms with an area of 100.7 m^2 and 88.5 m^2 ,
 - corridors, passages, halls, cold room, waiting room, two changing rooms, rooms for the priest and master of ceremonies, staff rooms – 232 m²,
 - changing rooms, dining rooms, toilets, showers 92 m²,
 - an area rented to run a flower shop -70.6 m^2 ,
 - an area rented to run a restaurant: 152.1 m^{2} ,
 - d. length of the cemetery fence -2,062 m,
 - e. concrete garbage bins -18 pcs.
- 2. The municipal cemetery (Starofarny) in 15 Grunwaldzka Street established around 1809:
 - a. the area of 1.92 hectares, including internal roads paved with a mineral layer or unpaved -1,400 m², external roads -600 m², a wall columbarium built in the western part of the cemetery.
 - b. a brick funeral home with a basement, with a usable area of 35 m^2 ,
 - c. water intakes: waterworks 5 taps,
 - d. toilet none,
 - e. a brick garbage bin with a hardened bottom.
- 3. The municipal cemetery in 51 Kcyńska Street established around 1880:
 - a. the area of 2.857 hectares, including the area of internal unpaved roads 3,400 $m^2,$ external paved roads 600 $m^2,$ 3 columbarium walls,
 - b. a brick funeral home with a usable area of 39.20 m² consisting of a ceremonial funeral hall and a service room,
 - c. water intakes: waterworks 4 taps,
 - d. a toilet without drain -1 pc,
 - e. a concrete garbage bin.
- 4. The municipal cemetery in 2 Lotników Street established around 1934:
 - a. the area of over 1.283 hectares, including the area of internal unpaved roads 1,280 m², and external paved roads 500 m²,

- b. a brick funeral home with a usable area of 56.5 m^2 consisting of a ceremonial funeral hall and a service room,
- c. water intakes: own pump -1 piece, waterworks -3 taps.
- d. a toilet without drain -1 pc,
- e. a concrete garbage bin.
- 5. The Ludwikowo municipal cemetery in 4 Ludwikowo Street established around 1920:
 - a. the area of 1.102 hectares, including the area of internal unpaved roads $1,533 \text{ m}^2$, external paved roads 600 m^2 ,
 - b. a brick funeral home with a usable area of approx. 75 m^2 consisting of a ceremonial funeral hall and a staff room,
 - c. water intakes: 3 pcs. (waterworks supply),
 - d. a toilet without drain -1 pc,
 - e. a concrete garbage bin.

		Area		Number of graves as of 11.10.2022	Hedge	Colum baria
Specyficity	of the facility (hectares)	interna l roads (m ²)	extern al roads (m ²)	in total	(in linear metres)	
Wiślana Cemetery	23,770	19.949	800	27.279	331	yes
Grunwaldzka Cemetery*	1,920	1.400	600	3.271	-	yes
Kcyńska Cemetery	2,857	3.400	600	5.579	353	yes
Lotników Cemetery	1,283	1.280	500	2.324	221	no
Ludwikowo Cemetery	1,102	1.533	600	1.255	62	no

Table 2. Municipal cemeteries – technical and location specification

Note: * - 273 under supervision of the Conservator of Monuments

Source: Authors' own study based on data obtained from the City Hall in Bydgoszcz.

With reference to the presented characteristics and the data in Table 2, it can be concluded that the cemetery located in Wiślana Street has the largest area (23,770 ha) and the number of graves (27,279). It also has the most extensive infrastructure.

The cemetery with the smallest area and the fewest number of graves is located in Ludwikowo Street. The graves there are only family graves as there are no niches available in the columbarium. Due to historical conditions and the burial culture in Poland, family graves dominate the structures encountered so far (especially those established in earlier periods).

3. Waste Management at Burial Sites

Cemeteries benefit from selective waste collection that is carried out in specially marked containers intended for selective waste collection. Their pool is increased before All Saints' Day (1 November) and whenever the demand is increased. The waste is removed by a specialized waste removal company, whose responsibilities include:

- a. collecting waste that was left on the public area of the cemetery by visitors or moved by the wind from the surface of each cemetery into marked containers intended for selective waste collection,
- b. weekly removal of "wild" garbage dumps, including waste that remains after emptying containers from the cemetery, while observing the principles of segregation.

Years	Amount	in PLN
	Total	Monthly average
2023	794,049.70	66,171
2022	532,250.02	44,354
2021	382,476.76	31,873

Table 3. Waste disposal costs in 2021-2023

Source: Authors' own study based on data obtained from the City Hall in Bydgoszcz.

Based on the data presented in Table 3, it can be concluded that the costs of waste disposal tend to be increasing from year to year. In 2023, there was an increase of almost 50% compared to 2022 and over 107% compared to 2021. This situation arises from the increase in prices related to the requirements of waste segregation and processing (including the cleaning of the containers themselves) caused by the situation on the energy market.

Years	Amount in PLN						
	Total	Monthly average					
2023	275,400	22,950					
2022	211,682	17,640					
2021	341,232	28,436					

 Table 4. Costs of cleaning and greenery works in 2021-2023

Source: Authors' own study based on data obtained from the City Hall in Bydgoszcz.

The data in Table 4 lead to a conclusion that it is difficult to clearly indicate a trend in this case. Of the three years presented, the highest amount was incurred in 2021. Then, in 2022, a downward trend appeared, only to record an upward trend again, in 2022. The amounts presented in table 2 include, but are not limited to maintaining greenery in cemeteries. These types of activities include:

1) Regarding maintenance of hedges and shrubs, at least twice a year:

- a) trimming hedges and weeding,
- b) collecting the cut shoots and removing them immediately.
- 2) Regarding grubbing up trees that pose a threat and removing their cut off parts:
 - a) sawing off branches, twigs and parts of the trunk, lowering them on ropes and cutting them into transport-convenient sections
 - b) removing the cut parts of the tree outside the facility and cleaning up any remaining waste from the cemetery. The wood obtained during the work remains at the Contractor's disposal,
 - c) grubbing up tree trunks and removing them,
 - d) removal of stumps.
- 3) Carrying out maintenance cuts to approximately 50 trees located in municipal cemeteries in Bydgoszcz.

Each of the tasks performed regarding waste collection, cleaning and greenery work may become emergency work, performed at a telephone request.

Maintaining order and cleanliness in cemeteries concerns primarily:

- a) ensuring silence in cemeteries,
- b) from Monday to Saturday, excluding holidays and days on which funeral ceremonies were not booked:
 - opening the gates of individual cemeteries at hours agreed with the Contracting Authority.
 - opening and closing funeral homes for funeral ceremonies.
 - monitoring the entry of vehicles into cemeteries billing of entries is done by collecting copies of entry invoices from individuals entering the cemetery. Cemetery service vehicles and vehicles for transporting disabled persons (with an ID documenting the degree of disability issued by an authorized body) are exempt from the fee.

When performing the activities listed in subsection b), the Contractor is obliged to remain within the cemetery premises.

With regard to maintaining cleanliness, the following activities are also eligible:

- a) maintenance of doors, windows, locks and other elements in funeral homes and cemetery entrance gates,
- b) maintenance of pumps, taps and springs located in cemeteries, performing minor repairs, replenishing or replacing damaged and/or leaking elements and cleaning water drains,
- c) performing other minor intervention works at the Contracting Authority's phone request, which consist in repairing, replacing or securing damaged

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property, to the extent agreed with the Contracting Authority, billed on a cost estimate up to a total value not exceeding PLN 3,000,

- d) removing graffiti from the cemetery infrastructure with a total area of up to 20 m^2 , especially from funeral home buildings and cemetery fences,
- e) immediate securing of the damage that occurs in cemeteries with a barrier tape (including fallen trees, sinkholes),
- f) removal and disposal of tombstones or their fragments (rubble) indicated by the Contracting Authority in a volume of up to 3 m³ per month from each cemetery, at the Contractor's expense,
- g) in special cases, at the Contracting Authority's phone request:
 - closing the cemeteries (with padlocks, chains, other forms or by inserting fence panels),
 - placing public information provided by the Contracting Authority in cemeteries (e.g. banners, etc.),
 - removal of advertisements, banners, stickers, etc. from cemetery facilities that were displayed without the consent of the Contracting Authority.

Maintaining cleanliness involves:

- a) sweeping, washing floors, dusting, cleaning rooms and sanitary facilities if necessary (at least once a week) and washing windows in funeral homes twice a year, i.e. in spring and winter,
- b) disinfection of ceremonial rooms with agents of the widest spectrum of action, after each funeral ceremony, but at least once a week.

In the context of maintaining roads and greenery in cemeteries, the following activities have been qualified:

- 1) Regarding maintenance of external and internal roads:
 - a) removing any residual dirt and waste from road areas as required as well as removing overgrown grass and weeds,
 - b) in the period from April 1 to October 31:
 - raking and weeding the surface of unpaved roads,
 - sweeping of paved roads.
 - c) in the period from December 1 to March 31 and from November 1 to November 30, in addition to the possible need to perform the activities specified in point. a) and/or b), further duties include:
 - removal of lingering snow on roads and main communication routes, commencing the action on the day after the end of snowfall,
 - in the event of icing: sprinkling main roads, sidewalks and alleys with sand, commencing the action on the day after the icing occurs,
 - cutting out regrowth of shrubs and self-seeding trees, including their removal from the entire cemetery and its old graves, once a month,

- 2) Regarding maintenance of green areas:
 - a) mowing green areas where vegetation is higher than 15 cm, from cemeteries, including neglected or run down graves,
 - b) raking and removing the mow no later than 2 days after mowing.
- 3) To be agreed with the Contracting Authority:
 - a) removal of regrowth of trees and shrubs from the surface of cemeteries,
 - b) removal of tree and shrub regrowth from neglected or run down graves.

With regard to the entities that have been selected by the local government to take care of the condition of cemeteries, each time the Contractor performs any work on the maintenance of the cemeteries, they must exercise particular caution so as not to disturb the graves located nearby.

Moreover, each instance of green waste management involves removing it from the cemeteries and is carried out at the Contractor's expense, in accordance with applicable legal provisions in this regard. The contractor of these activities is also obliged to obtain civil liability insurance for damages and consequences of accidents relating to employees and third parties, along with pursuing insurance claims.

For the purpose of identification and for the good of the facility, persons performing work entrusted to them in cemeteries are obliged to wear vests provided by the Contracting Authority.

4. Demographic Situation and Burials

The specificity of the demographic situation in each community has a significant impact on its functioning. This is perceptible in the context of the scale and scope of public services provided to the members of a given community. Therefore, in the authors' opinion, it is justified to present this topic in relation to the conducted analyses.

	Years									
Specyficity	20	20	2	021	2022					
	births	deaths	births	deaths	births	deaths				
Women	1,358	2,335	1,335	2,547	1,208	2,253				
Men	1,464	2,342	1,447	2,557	1,266	2,160				
Total	2,822	4,677	2,782	5,104	2,474	4,413				

Table 5. Births and deaths in Bydgoszcz in 2020-2023

Source: https://bydgoszcz.stat.gov.pl/, accessed on: 28.08.2023.

The analysis of the data presented in Table 5 showed that the mortality rate of men and women in the city of Bydgoszcz in the years 2020-2022 is comparable. Moreover, of all Bydgoszcz residents who died in 2020, 34.8% (in 2021) and 24.3% (in 2022) were buried in one of the five municipal cemeteries. The remaining burials took place in one of the 12 parish cemeteries.

It can also be assumed that a third of the deceased in the city of Bydgoszcz are buried in municipal cemeteries, and of these burials, a third are urn funerals.

The detailed data on burials in municipal cemeteries in the years 2018-2023 are presented in Table 6.

Table 6. Number of people buried in municipal cemeteries in Bydgoszcz in the period 2018-15/08/2023

Cemetery	Years									
	2018	2019	2020	2021	2022	15.08.2023				
Wiślana Street	32,890	34,939	36,001	37,380	38,118	38,977				
Kcyńska Street	7,599	7,992	8,279	8,483	8,623	8,771				
ul. Grunwaldzka	4,125	4,247	4,299	4,327	4,449	4,584				
Street										
ul. Lotników Street	4,037	4,091	4,144	4,261	4,326	4,373				
ul. Ludwikowo	1,149	1,166	1,199	1,248	1,256	1,259				
Street										
Total	49,860	52,435	53,922	55,699	56,772	57,964				

Source: Authors' own study based on data obtained from the Department of Greenery and Municipal Management of the City Hall in Bydgoszcz.

Based on the data presented in Table 6, it can be concluded that the number of people buried in all municipal cemeteries shows a cyclical, upward trend.

The data analysis (Table 7, Figure 1) shows that the most people were buried in 2019. Also in 2021, the percentage of burials was high, but almost 67.5% lower than in 2019, but 60.4% higher than in 2022. It can be assumed that 2023 will bring be a significant increase in burials, because, by August 15, their number, is already higher by 119 more people than in 2022. This represents an increase of 111.1% compared to the end of the previous year. Of all municipal cemeteries in Bydgoszcz, the most burials take place at the cemetery in Wiślana Street, due to the largest area of this cemetery (Table 7).

	Years									
	201	9	202	0	202	1	202	2	15.08.	2023
Cemetery	No of	%								
	people		people		people		people		people	
Wiślana	2,049	77,8	1,062	71.4	1,379	77.6	738	68.8	859	72.1
Street										
Kcyńska	393	14,9	287	19.3	204	11.5	140	13.0	148	12.4
Street										
Grunwaldzka	122	4,6	52	3.5	28	1.6	122	11.4	135	11.3
Street										
Lotników	54	2,0	53	3,6	117	6.6	65	6.1	47	3.9
Street										

 Table 7. Number and structure of burials in 2019 - 2023
 Comparison
 Comparison

Ludwikowo (Rynkowska)	17	0,7	33	2.2	49	2.7	8	0.7	3	0.3
Street										
Total	2,635	100	1,487	100	1,777	100	1,073	100	1,192	100

Source: Authors' own study based on data from the Department of Greenery and Municipal Management of the City Hall in Bydgoszcz.

The situation related to the structure of completed burials in the municipal cemeteries is also illustrated in Figure 1.

Figure 1. The structure of burials completed in the years 2019-2023 (in %)



Source: Authors' own study based on Table 2.

In order to maintain municipal cemeteries and provide them with appropriate care and supervision, local governments collect fees related to the provision of a burial place. These fees vary, depending on the specificity of the site (whether it is earthen horizontally or vertically, whether the grave is a brick one, etc.).

The detailed fees for the provision of a burial place are as follows:

- 1. For 1 burial place, traditional burial PLN 594
- 2. Family grave, for 2 vertical burial places, traditional burial PLN 1,252.80
- 3. Family grave, for 3 vertical burial places, traditional burial PLN 1,620
- 4. Family grave, for 2 horizontal burial places, traditional burial PLN 2,052
- 5. Family grave for 2 horizontal burial places, two levels (4 places), traditional burial PLN 2,592
- 6. Family grave for 3 horizontal burial places, traditional burial PLN 3,240
- 7. For the grave of a child (who died before the age of 6) PLN 198.72
- 8. Change of status from an earth grave to a brick grave, the fee is due for each place in the grave (multiple of the number of earth places, traditional burial in a grave) PLN 3,240

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- 9. For a brick grave for 1 person PLN 3,024
- 10. For a family grave with two places vertically PLN 6,064
- 11. For a 2-place horizontal family grave PLN 10,260
- 12. For a family grave with two horizontal seats and a two-level grave (4 places) PLN 12,960
- 13. For a family brick grave with more than 4 places, in multiples of 2 or 3 places vertically, depending on the number of places in the grave (the fee is due for each place in the grave) PLN 2,592
- 14. Catacombs for each 1 m^2 of occupied area PLN 3,240 15.
- 15. The fee for a niche in the columbarium or an urn grave PLN 540.

Additionally, attention should be paid to the nature of the one-time fees. These include:

- 1. The one-time fee for burying the coffin in the catacombs PLN 1,512
- 2. The one-time fee for burying 1 urn in a specified grave (For 1 earth place traditional burial, the family grave for 2 earth places vertically traditional burial, the family grave for 3 earth places vertically traditional burial, the family grave for 2 earth places horizontally traditional burial, the family grave for 2 earth places horizontally traditional burial, the family grave for 3 earth places horizontally traditional burial, the family grave for 3 earth places horizontally traditional burial, the family grave for 3 earth places horizontally traditional burial, the family grave for 3 earth places horizontally traditional burial, the grave of a child (who died before the age of 6) PLN 2,160
- 3. One-time fee for burying 1 urn in a specified grave (For a single place brick grave; for a 2-place vertical family brick grave; for a 2-place horizontal family brick grave; for a 2-place, 2-level family brick grave (4 places); for a family brick grave with more than 4 places in multiples of 2 or 3 places vertically depending on the number of places in the grave (the fee is due for each place in the grave); catacombs for each 1m² of occupied area PLN 1,080
- The one-time fee for burying the urn in a columbarium or a grave intended for urns, and an earth grave in which the urn was previously placed) – PLN 1,080
- 5. The one-time fee for burying the urn for the purpose of reusing the grave after 20 years in a brick grave and in an earth grave containing the urn PLN 324

The persons who perform funeral ceremonies can also use the ceremonial hall. In this case, the one-time fee is PLN 162, and the fee for a single vehicle entry to the cemetery is PLN 70.20 (Resolution, 2018).

5. Summary and Conclusions

The provision of a burial place is an inalienable right of every human being. Regardless of the person's social affiliation, views or religion, a place should be provided after death where the body or ashes will be placed. Under the regulations that are currently in force in Poland, it is not possible for the ashes of a loved one to be kept at home or scattered (on the ground or in water), even if the deceased had explicitly expressed such a wish before their death.

Therefore, the burial is organized in a municipal or parish cemetery. The related fees are set by the city authorities or a borough decision-making body to ensure service, order and care for the common good. The example discussed in this article is the city of Bydgoszcz and its municipal cemeteries located within the city area. Due to the growing costs related to the purchase of energy or labour, the costs related to the maintenance of these areas tend to be increasing every year.

However, the local government has not increased fees for the people wishing to bury a loved one since 2018. In order to improve the maintenance of order and the quality of services at the cemetery, the manager of the cemeteries was also changed in October 2020. Since 2018, they have been administered by Zieleń Miejska (which had a valid agreement until 2021), however, under the agreement, the current management is the Bydgoszcz City Hall. Its customer service offices can perform all activities related to cemetery access and facilities.

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