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Keywords: youth; homicide; violence; maps; territory.

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# Death Territories: Visibility of Juvenile Residents of Porto Alegre who were Victims of Homicide in 2015, 2016, 2017 and 2018

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### Introduction

orto Alegre is listed among the most violents cities in the world" is the headline of the paper with largest circulation in Rio Grande do Sul, in april 2nd, 2017. The report presents research data conducted by Igarapé Institute and published in the newspaper The Economist. Since the end of 2016, several news reports gave a scenario of vertiginous increase in the episodes of lethal violence in the state capital of Rio Grande do Sul, with emblematic cases that even caused changes in city administration, for example, with the beginning of the work of Nacional Force in aid to the Military Police since august of 2016 to march of 2018.

There still are many gaps in the comprehension of the phenomenon of increase in violent mortality in the city. Despite the existence of important initiatives, such as the RBS Group electronic platform "X-Ray of Violence", there is a lack of research to understand who are the individuals most affected by the increasing number of homicides, and especially their distribution in the city's territory. Thus, the present article traces some first considerations about these issues, as it intends to build the profile of the residents of Porto Alegre who were victims of homicides. identifyina neighborhoods in which they lived and the places where

the homicidal events occurred in the years of 2015, 2016, 2017 and 2018.

It is important to notice that this research differs from most homicide researches, as it seeks to ascertain who were the young homicide victims living in Porto Alegre, where they lived and where they died. Thus, the largest sample concerns young residents of the city who are victims of this type of violent mortality, no matter where the homicidal event occurred. As will be seen, the vast majority of events also took place in Porto Alegre, but there are cases where young residents of the city were killed in other municipalities.

The choice for this sample is justified since no previous research concerned with assessing the profile of homicide victims in Porto Alegre was identified, but only investigations with reference to violent events in the city. Therefore, it was not possible to know if the residents of the city were victims of this type of violent lethality also in the geographic circumscription of the municipality, or if the events violated these territorial limits. Thus, a major innovation of the present study concerns the attempt to evaluate a correspondence between place of residence and place of death of young people, identifying the extent to which residents of Porto Alegre are murdered in the city itself, or in various other locations, as well as as the spatial distribution of these occurrences.

Regarding the risk profile, one hypothesis that guides the present study shows that young men represent the majority of victims of this type of violent death, in addition to the presence of a racial factor that increases the proportion of blacks in total homicides compared to the racial distribution of the city's population. Regarding localities, it is also believed that a restricted number of neighborhoods in Porto Alegre will be identified as a place of death by the majority of youth homicides.

To fulfill the proposal, the research used data collected and organized by the Mortality Information System (SIM), linked to the Health Department of Porto Alegre (SMSPA). To gain access to information, the research was conducted for eight months at the UFRGS Research Ethics Committee (CEP-UFRGS) and the SMSPA Ethics Committee. The first submission of the project to CEP-UFRGS was on 14/07/2017 and the approval opinion was released on 09/14/2017. After

approval by the university committee on the same day, the SMSPA Committee was included as a co-participant institution, with an opinion released on 02/22/2018. Later on, two amendments were submitted in 06/07/2018 and 04/11/2019, in order to complement the research with data from 2017 and 2018, with the opinion of approval published in 07/10/2018 and 05/13/2019. Thus, researchers were granted access to the database of SIM, that served as the main source of this paper, and was used as it follows.

#### II. METHODOLOGY

In order to better establish the recent panorama of youth homicides in the city of Porto Alegre, especially its location in the city territory and the more detailed profile of its victims, primary data were sought through the Mortality Information System (SIM). The source used, therefore, is from several studies in the area of violence, as primary data are available nationwide and with standardized cataloging procedures (PROVENZA, et al, 2017, p. 300). Database analysis was performed using the IBM SPSS (Statistical Package for Social Sciences) program.

The database of 2015, which includes all deaths occurred with residents of Porto Alegre, represent a total of 11.454 deaths, from natural or unnatural causes. By using the SIM Data Dictionary, it was possible to identify the variables and their values. The CIRCOBITO variable from the SIM database indicates the probable circumstance of unnatural death, separating these types of violence into five values: accident; suicide; murder; others and ignored. Homicide deaths were selected, generating a new database of 678 homicides. In 2016, the total number of deaths was evaluated in 12.556, including natural causes and unnatural causes. After the selection of homicides, a total of 803 victims were found. In 2017, the total number of deaths reached 11.971, of which 661 were classified as homicides. Regarding the year of 2018, the total number of deths was 12,209, of which 517 were classified as homicides.

Subsequently, the database was divided into three criteria: age, gender and identification as white or non-white. The last stage of the research, then, consisted in the analysis of the place of life and death of young people residing in Porto Alegre from the construction of cartographic representations indicating such territorial distribution. Before entering the results of the analyzes performed, it is important to return to the data presented in other researches regarding homicides in Porto Alegre.

In this sense, the idea of making a homicide map of the city is not unprecedented, and was also the object of a relevant research published in 2010, in which a Social Cartography of Homicides was conducted in Porto Alegre from 2002 to 2006 (RUSSO; SANTOS, 2010). As some studies had already shown to be the

profile of victims of violent lethality in Brazil young, black man, residents of deprived areas (MINAYO & SOUZA, 2003; LEMGRUBER, 2006), Santos and Russo ratify this conclusion in respect to Porto Alegre (2010, p. 213). According to the authors, in 2006, the city had a homicide rate of 30.9 per 100,000 inhabitants, representing the seventh highest death rate, two percentage points below the national average (RUSSO; SANTOS, 2010, p. 214).

In a specific study on homicides and youth in Brazil published in 2013, it was shown that the city of Porto Alegre, between 2001 and 2011, maintained its homicide rate of the total population in a certain pattern, reaching the minimum rate in 2006 (35.5 homicides per 100 thousand inhabitants) and the maximum rate of 47.3 in 2007 (WAISELFISZ, 2013, p. 48). The rate of change for the period was only 1.3%. However, with regard to the specific homicide rate of the young population, the variation reached 18.3% in the same period, with a rate of 114.4 homicides per 100,000 inhabitants in 2007 (ibidem, p. 57).

Regarding the most recent scenario, it is noted that data published in 2018 by the Public Safety Yearbook (FBSP, 2018) show that in the city of Porto Alegre, in 2015, 744 homicides were committed. In the same year, the rate of 52.9 Intentional Lethal Violent Crimes per 100,000 inhabitants is reached. In relation to the year of 2016, there is an important divergence. In a first publication, the homicides of the capital of Rio Grande do Sul in 2016 added up to 908 victims (FBSP, 2017). In the following year's publication, there is a revision of the data that reduces the amount to 785 homicides (FBSP, 2018).

In 2017, the data indicate the occurrence of 670 homicides, representing the rate of 46,3 Intentional Violent Deaths per 100,000 inhabitants. In 2018, the data indicated 536 homicides, representing 37,2 Intentional Violent Deaths per 100,000 inhabitants (FBSP, 2018; 2019). It is valid to consider that the data source of such publication is the State Secretariats of Public Security and / or Social Defense, the Brazilian Institute of Geography and Statistics (IBGE) and the Brazilian Forum of Public Security, and not the Mortality Information System (WAISELFISZ, 2013, p. 15).

Thus, in a primary analysis, it is possible to verify an increase in homicides in the city of Porto Alegre in the last decade, quite significantly, especially compared to other important capitals of the country, such as Rio de Janeiro. In this city, known by common sense as a place with high rates of violent lethality, it was found a rate of 42.3 homicides/100 thousand inhabitants in 2006, that is, well above the 30.9 of the state capital at the time. However, according to the FBSP, in 2015, the rate for Intentional Violent Deaths of the capital of Rio de Janeiro was 19.4 in 2015, 30.0 in 2016, 32.7 in 2017, and 29,7 in 2018 (FBSB, 2017; 2018; 2019). Porto Alegre presented rates of 52.9, 55.8, 46,3

and 37,2 in the respective years (FBSB, 2017; 2018; 2019).

Given that the data that will be presented and discussed in this paper come from SIM, this research identified some distortions in relation to the data published by the Public Safety Yearbook. Thus, according to SIM, in 2015 the absolute number of homicides in the city of Porto Alegre was 625, while in 2016 it was 746 victims. In 2017 there was 601 homicide victims of homicide. Finally, in 2018, there was 517 homicides in the municipality. Regarding homicide rates per 100,000 inhabitants, the Population Estimates provided by the Economics and Statistics Foundation (FEE, 2015; 2016; 2017) led to the following rates:

Table 1: Homicides per 100 thousand inhabitants

	Homicides in Porto Alegre (SIM)	Population (FEE)	Rate per 100 thousand inhabitants
2015	625	1.465.428	42,6 homicides/100 thousand inhabitants
2016	746	1.464.231	50,9 homicides/100 thousand inhabitants
2017	601	1.468.301	40,9 homicides/100 thousand inhabitants

As already stated, the objective of this research is to outline the profile of young homicide victims living in Porto Alegre, which is slightly different from the analysis taken up to date. In the next topics, the analysis will be based on the total amount of homicides victimizing youths living in Porto Alegre.

#### Data Analysis III.

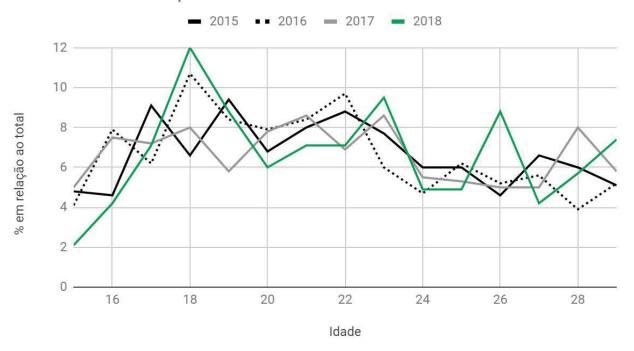
### a) Analysis Parameters (2015-2016)

### i. Age

The first parameter of analysis concerns the age of homicide victims residents of the city of Porto Alegre between 2015 and 2018. Limiting to the age group that corresponds to the legal concept of youth, as provided by the Youth Statute (Law 12.852 of 2013) in its art. 1, § 1. a first selection was made in order to better investigate how homicide deaths were distributed among people between 15 and 29 years old. The choice for this age group, in addition to respecting the legal definition, was based on an understanding that intends to amplify the idea of youth as much as possible, including the beginning of adolescence and extending the analysis to the onset of adulthood.

Thus, out of a total of 678 homicides in 2015, 351 occured in this age group, representing around 51.80% of the total number of deaths by homicide. In 2016, the representation of youth in all homicides increases to 58.0%, with 466 young people out of a total of 803 homicide victims. In 2017, out of 666 homicides, 361 were young people, representing 54.6% of the total amount. Finally, in 2018, out of 517 homicides, 283 were young people, representing 54.7% of all homicide victims.

## % de Homicídios por idade: 15-29 anos



Source: SIM/Porto Alegre Health Department; self elaboration.

Graph 1: Homicides of young people living in Porto Alegre in 2015 to 2018

As can be seen from the graph above, in addition to the increase in the proportion of young people in relation to total homicides, there are two ages in which the increase from one year to the next is substantial. Thus, at the ages of 16 and 18, there was an increase of more than 20 homicides from one year to the next, a growth that occurred in almost all age groups, except the ages of 14, 17 and 28 years. In 2015, the critical age group remained between 17 and 21 years old; In 2016, there is a "backward" shift, that is, the critical period starts at 16 and extends to 21 years. In that year, there was also a second problematic range of homicide increases between 25 and 27 years. In 2017, the homicide peaks are at 21, 23 and 28 years, with a significant fall in the age group between 24 and 26 years. Finally, in 2018, the critical period is from 17 to 19 years, with a significant fall in the age group between 24 and 25 years. At the other ages, an alternation in increases and decreases occurs each year, without being possible to identify a pattern in these occurrences.

To perform a temporal comparison, we used the data presented in the study by Santos and Russo (2010). It is noted that the representation of youth in the total amount of violent deaths in the city of Porto Alegre seems, in recent times, to be more important than it was in 2006, when the highest percentage of homicide victims was concentrated in between 25 to 34 years old

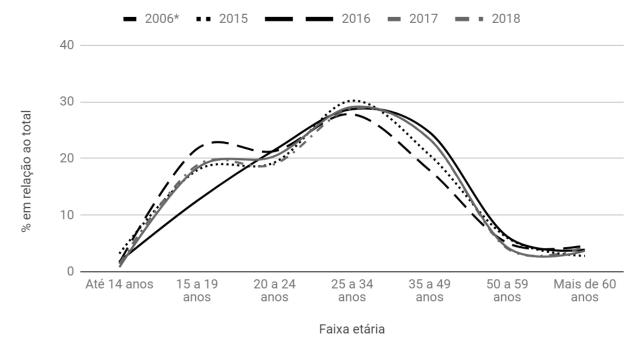
(28.7%), followed by the 35 to 49 (24.6%) age group (RUSSO; SANTOS, 2010, p. 219). Thus, homicides between 15 and 24 years old at the time represented 34% of the total number of victims. Ten years later, the same age group corresponds to 43.1% of the total amount:

Table 2: Age range of homicide victims in Porto Alegre (2006, 2015, 2016 and 2017)

Age range	% of total homicides in Porto Alegre				
	2006*	2015	2016	2017	2018
Up to 14 anos	1,8	2,7	1,7	0,8	1,4
15 to 19 years	12,5	18,7	21,9	18,1	18,8
20 to 24 years	21,5	19,2	21,2	19,5	19
25 to 34 years	28,7	29,6	26,8	29,5	28,8
35 to 49 years	24,6	20,3	18,2	23,8	23,4
50 to 59 years	6,2	5,6	5,2	3,9	4,1
More than 60 years	3,9	3,3	4,8	4,6	4,4

Source: SIM/Porto Alegre Health Department; \* SANTOS; RUSSO 2010, p. 219

## 2006\*, 2015, 2016, 2017 e 2018



Source: SIM/Porto Alegre Health Department; \* SANTOS; RUSSO 2010, p. 219; self elaboration. Graph 2: Age group of homicide victims in Porto Alegre (2006, 2015, 2016, 2017 and 2018)

The line graph above shows a significant change in the distribution of homicides of residents in Porto Alegre ten years after the research published by Santos and Russo. In the period analyzed, the normal curve of the graph deforms, and starts to show an important peak in the age group of 15-19 years. Thus, although data show that homicides continue to be more representative in the age group between 25 and 34 years, recent years present a new picture that anticipates to a much earlier period of occurrence of these deaths.

### ii. Sex

Regarding the data from 2015, it is clear that there was a substantial difference in the frequency of homicides between young men and women. Of the 351 juveniles living in Porto Alegre who were victims of homicide, only 18 were female juveniles, representing 5.1% of the total amount of homicides. Homicides of young men living in the city of Porto Alegre amounted to 333 cases, corresponding to 94.9% of all deaths by homicide.

In 2016, there was an increase in the total amount of homicide cases in the age group studied from 351 to 466 cases -, but also maintaining the highest incidence of homicides among young men. Only 33 corresponded to the death of female youth, representing 7.1% of all homicides, still much lower than the representation of male youth, equivalent to 92.9% of all homicide cases.

In the following years, there is a certain decrease in the number of violent deaths in the city. In 2017, out of the 361 youth homicides that occurred, 37 correspond to female juvenile deaths, representing 10.3% of the homicides in the period, which is equivalent to double of the percentage observed in 2015. Among male youth, there were 324 cases of homicide in 2017, representing 89.7% of all deaths. In 2018, it is possible to further observe the decrease in the amount of violent deaths in general. Of the 283 homicides, 27 victimized female youth, representing 9.5% of all homicides. The number of homicides among young males, in turn, corresponded to 256 cases, representing 90.5% of all deaths.

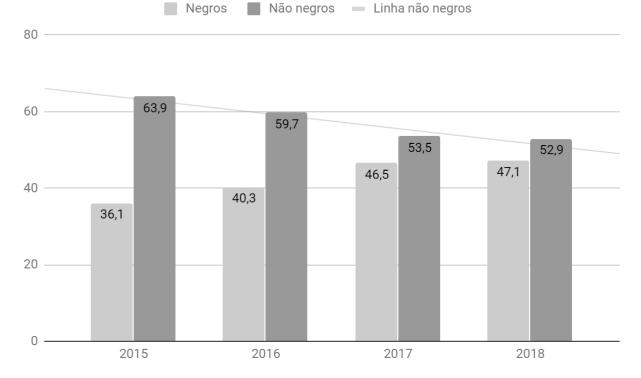
The victimization of young men in Porto Alegre is partly aligned with the general pattern observed in Brazil, as the absolute majority of homicide deaths in this age group occur among males. The Atlas of Violence of 2018 points out that, of the 33.590 juveniles who were murdered in Brazil in 2016, 94.6% were male, representing a 7.4% increase rate from 2015 (FBSP 2018). The homicide rate among young men per 100,000 juveniles also reflects an increase from 2014: between 2006 and 2013, the rate remained around 70, rising to 93.5 (2014), 97.8 (2015) and 113.4 (2016).

#### iii. Race

The difference in lethality between black youth and the rest of the population is not only an old problem, but one that has increased in the last decade (CERQUEIRA; COELHO, 2017). Whereas between 2006 and 2016 there was a 23.1% growth in the black homicide rate, the mortality of non-black individuals decreased 6.8% (CERQUEIRA, 2018, p. 33). In 2016, for example, the homicide rate of black people was two and a half times higher than that of non-black people (16.0% against 40.2%) (CERQUEIRA, 2018, p. 40).

Young black males continue to be murdered every year as if they were in war. At 21 years old, when there ir a peak in the chances of a person being murdered in Brazil, black people are 147% more likely to be victims of homicides (CERQUEIRA; COELHO, 2017, p. 9). According to the Juvenile Violence Vulnerability Index (2017), in 2015, black youth is, on average, 2.71 more likely to die from homicide than white youth in the country, and in Rio Grande do Sul the relative risk of young black people being victims of homicide, in relation to young white people, is 1.3 (FBSP, 2017, p. 27).

Porto Aleare's Althouah population predominantly white - 79.23% of the population is white, 20.24% black, 0.29% yellow and 0.23% indigenous people - from the analysis of the graphs it is possible to observe that the incidence of homicides among the voung black population is representative, and tends to grow. In 2015, the percentage of young black residents of the city who were victims of homicide was 36.1%. In 2016, the rate reached 40.3%, while in 2017 it reached 46.5%. Finally, in 2018, the rate was 47,1%.



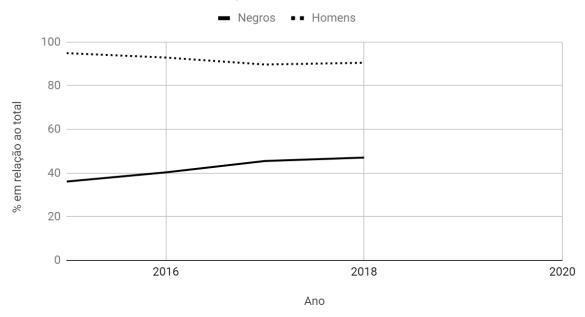
Source: SIM/Porto Alegre Health Department; self elaboration.

Graph 3: Percentage of young black and non-black homicide victims

Thus, there are two trends verified from the collected data expressed in the following graph. The upward curve of black representation in relation to the

homicide set of young residents of Porto Alegre is accompanied by a downward curve of male representation in all victims.

### Perfil dos homicídios dos jovens: 2015-2018



Graph 4: Profile of homicides of youth living in Porto Alegre

### b) Who dies the most

The higher incidence of homicides in the young population is not really new in the field of brazilian Sociology of Violence. If, as has been shown extensively, the age group that commits the most lethal violence is young people, it seems possible to generalize to state that these are substantially young men killing young men (DIRK; MOURA, 2017, p. 4). This process of lethal victimization of youth in the brazilian scenario began in 1980, and has gradually established itself as one of the main obstacles to the advancement of minimum public safety levels in the country (CERQUEIRA, 2017, p. 25).

Thus, the study Map of Violence (2013) already stated that youth homicide rates did not keep pace with advances in violence prevention policies, increasing from 42.4 per 100,000 youth in 1998 to 52.4 / 100,000 in 2013. (WAISELFISZ, 2013, p.11). Of all causes of mortality, those called external causes accounted for 73.2% of juvenile deaths in 2011 (ibid., P. 20), with homicide being the main cause responsible for this scenario. Thus, only in the Federative Unit of Rio Grande do Sul, the data shows a 34.5% increase in homicides of people between 15 and 29 years old, from 2005 to 2015 (CERQUEIRA, 2017, p. 27).

The explanations to the phenomenon are many and, as the present study does not intend to state the reasons of the phenomenon, but only to present an outlook of the profile of homicide deaths in the city of Porto Alegre, it would not fit here to expose all possible interpretations for such scenario. However, it is noteworthy that the characteristics that compose the profile of young homicide victims living in the capital, together with the locality of life and death of such victims, enable to trace some indications of possible reasons that explain the increase in youth homicides in Porto Alegre in recent years.

Regarding the higher incidence of death among young men, gender is pointed out in several studies as a socio-demographic characteristic that has a higher relationship with the incidence of homicides (SOARES, 2000). Several reasons can be attributed to the higher number of violent deaths among men compared to women, some of them being the premise that men generally commit more violence than women (SOARES, 2008); or that boys would be subjected to less social control than girls, which would contribute to greater involvement in crime-related activities (HIRSCHI, 1969); also, due to the "socialization by violence", man feel the need to "neutralize" other man affirm their own masculinity (WALTER-LANG, 2001).

The data shows that the ones who still die the most are young men. However, this tendency was already expected, given several other studies that have already pointed to the same phenomenon at regional and national levels. A less expected trend that deserves attention is the percentage increase in young women

being murdered. Such phenomenon is still little explored and needs further debate. According to the Atlas of Violence (2018), the increase in the number of women being murdered can already be understood as a trend in Rio Grande do Sul, with a 90.1% increase in murder cases in just 10 years (2006-2016), with the highest number of cases reported in 2014 (250 cases), 2015 (284 cases) and 2016 (308 cases). The same study attributes the cause to femicide, highlighting sexual assault followed by death and homicide in domestic environments. The study, however, does not rule out the existence of other causes to the phenomenon, such as a greater participation of woman in drug traffic.

Regarding the race of those who die the most, the concentration of deaths affecting the black population undermines the often defended myth of democracy". According to this discrimination by skin color would be something irrelevant, that would not block opportunities, prohibit careers or increase the chances of black individuals being murdered in Brazil (COELHO; CERQUEIRA, 2017, p. 7). According to the Atlas of Violence (2018), in 2006 the homicide rate of black people per 100 thousand inhabitants in Rio Grande do Sul was 19.1, showing a growth over the years, reaching in 2016 a 36.8 rate. When analyzing the non-black homicide rate per 100,000 inhabitants, in 2006, Rio Grande do Sul reported a 17.6 rate, and only a 26.2 rate in 2016 (CERQUEIRA, 2018). Thus, although the population from Rio Grande do Sul is predominantly white, the increase in homicide deaths in the last decade has concentrated on the black population of the region.

In the case of homicides of blacks and juveniles, it is clear that the differences in lethality against African descendants are widened in the youth period. According to the Youth Vulnerability to Violence Index, in 24 brazilian Federation Units, the chance of a young black man dying is greater than that of a white juvenile (LIMA; et. Al, 2017, p. 28). It is evident how racial inequality is a key factor in understanding how violence in the youth period manifests itself in Brazil.

Sinhoretto and Morais, in a paper on violence and racism in Brazil, state that the analysis of available data on the phenomenon of violent death shows that the racialization of black youth operates the dehumanization of subjects, making their death plausible and inconsequential (2018, p. 24). Going further, Cerqueira and Moura conclude that the search for explanations of violent deaths in youth cannot neglect racism, claiming that beyond physical extinction there are thousands of symbolic deaths behind the loss of opportunity and personal growth, that many individuals suffer only because the color of their skin (2014, p. 82). They are materially and symbolically lost lives in the face of racism in Brazil.

### c) Place of life and death of youth

In order to locate youth homicides in the territorial space of the city of Porto Alegre, maps were developed as illustrative instruments neighborhoods a) where young homicide victims live; b) in which homicides occur. The maps were produced using the Open Source Geographic Information System (GIS), identified as "QGIS", a free platform of the Open Source Geospatial Foundation (OSGEO) used to the development of thematic maps through the intersection between shapelife documents and quantitative data.

The maps produced through the program are able to geographically demonstrate the incidence of quantitative variables. This study used the shapelife provided by the Porto Alegre City Hall, through its official website, which expresses the spatial limits of the municipality, and its official division into neighborhoods, according to Law 12.112/2016. Subsequently, it was possible to cross the shapelife and the quantitative data regarding places of residence and places death by homicide of young people living in the city of Porto Alegre (2015-2018), obtained from the Department of Health.

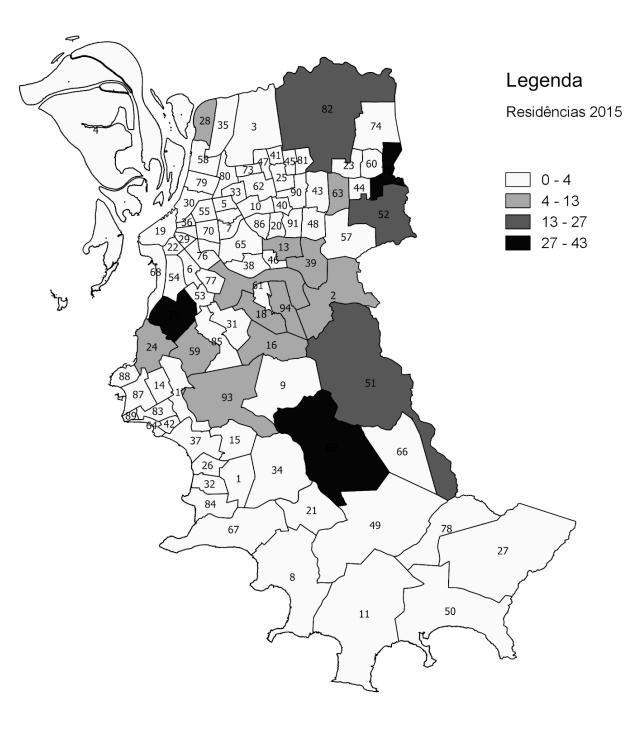
The software allowed the production of a series of maps demonstrating which neighborhoods had the highest and lowest concentrations of residences (living places) of young people murdered, as well as the neighborhoods where there was possible to observe the highest and the lowest incidence of homicides (places of death) in the period studied. It is noteworthy that the indexes used refer only to the distribution of absolute numbers of young homicide victims (both in relation to their place of residence and place of death), so that the rates produced that take into account proportion of young people in each territory.

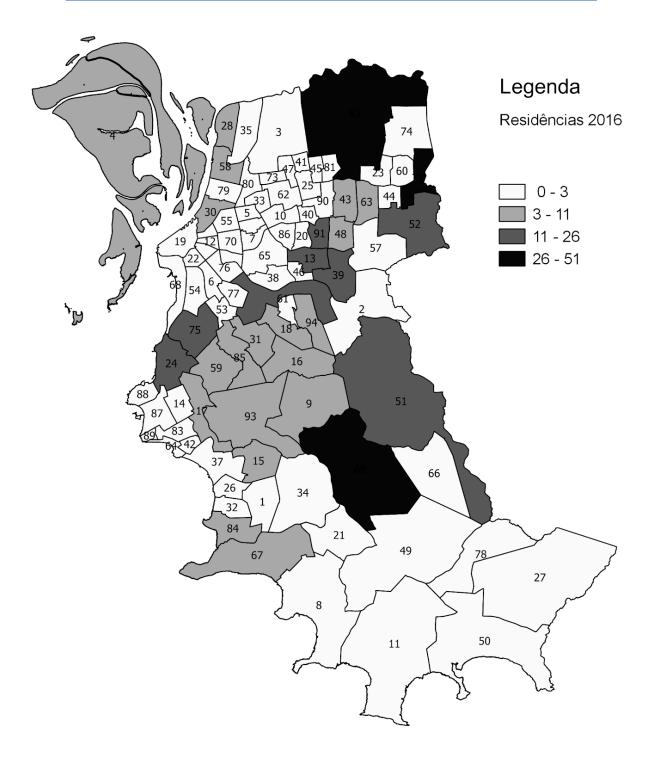
Crossing shapelife with quantitative data required the production of a new table ("match table"), through which a common column could be established between the shapelife "attribute table" and the quantitative data table. This common element was the OBJECTID, which in the shapelife "attribute table" correspondence to the code of each delimited area in the shapelife map. The union between shapelife and quantitative data by matching the OBJECTID code of each map area allowed cross-checking of data that geographically demonstrated the incidence of places of residence and places of death of murdered youth.

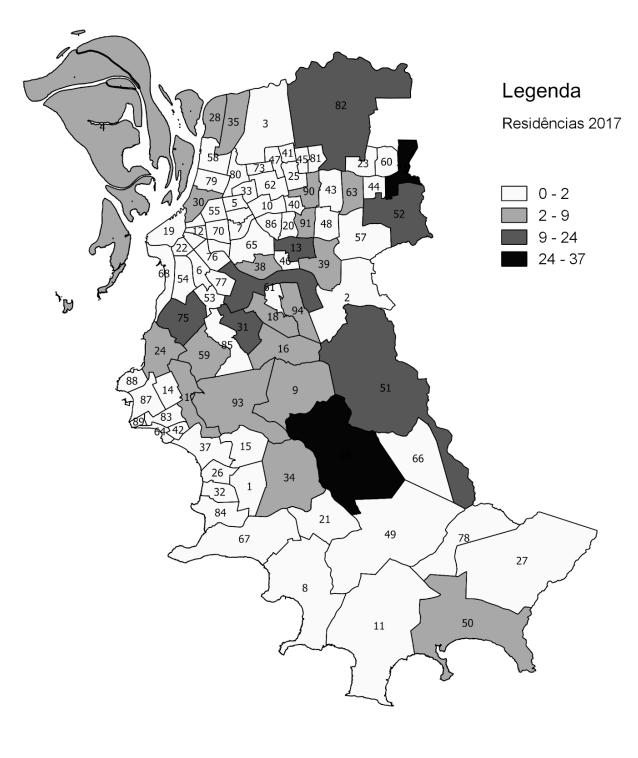
The shapelife used had 128 divisions, while quantitative data obtained from the Porto Alegre Health Department were expressed in a division of 94 neighborhoods. Most of the code areas provided in the shapelife corresponded to the neighborhoods indicated in the data, but some adaptations were still needed, especially in relation to the "Arquipélago", "Jardim Itu-Sabará" and "Protásio" territories. Also, neighborhoods that did not match to any shapelife code areas, and where there were no youth homicide residences or

deaths, were disregarded and represented by "0" in the match table, as well as the ignored data.

The result was the production of color gradient maps that reveal the concentration of victims' homes and homicide sites in each neighborhood of Porto Alegre. Such a gradient varies between black and white, so that each tone represents a concentration, classified as low (white), intermediate (light gray), high (dark gray), and very high (black). QGIS software itself defines natural breaks from the use of the jenks system. Natural breaks are defined from the numbers of concentrations found.







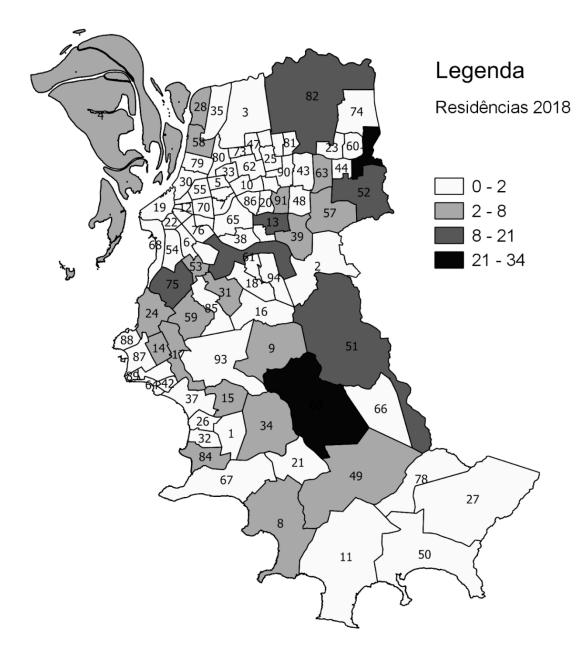


Image 1: Territories where young homicide victims reside

Table 3: Legend of the territories of Porto Alegre

Aberta Morros	1	Chapéu do Sol	21	Jardim Floresta	41	Partenon	61	São Sebastião	81
Agrono mia	2	Cidade Baixa	22	Jardim Isabel	42	Passo das Areia	62	Sarandi	82
Anchieta	3	Costa e Silva	23	Jardim Sabará	43	Passo das Pedras	63	Sétimo Céu	83



Arquipél ago	4	Cristal	24	Jardim Leopoldina	44	Pedra Redonda	64	Serraria	84
Auxiliad ora	5	Cristo Redentor	25	Jardim Lindóia	45	Petrópolis	65	Teresópolis	85
Azenha	6	Espírito Santo	26	Jardim do Salso	46	Pitinga	66	Três Figueiras	86
Bela Vista	7	Extrema	27	Jardim São Pedro	47	Ponta Grossa	67	Tristeza	87
Belém Novo	8	Farrapos	28	Jardim Itu	48	Praia de Belas	68	Vila Assunção	88
Belém Velho	9	Farroupilha	29	Lageado	49	Restinga	69	Vila Conceição	89
Boa Vista	10	Floresta	30	Lami	50	Rio Branco	70	Vila Ipiranga	90
Boa Vista Sul	11	Glória	31	Lomba do Pinheiro	51	Rubem Berta	71	Vila Jardim	91
Bom Fim	12	Guarujá	32	Mario Quintana	52	Santa Cecília	72	Vila João Pessoa	92
Bom Jesus	13	Higienópolis	33	Medianeira	53	Santa Maria Goretti	73	Vila Nova	93
Camaqu ã	14	Hípica	34	Menino Deus	54	Santa Rosa de Lima	74	São José	94
Campo novo	15	Humaitá	35	Moinhos de Vento	55	Santa Tereza	75		
Cascata	16	Independência	36	Mon't Serrat	56	Santana	76		
Cavalha da	17	Ipanema	37	Morro Santana	57	Santo Antônio	77		
Cel. Aparício Borges	18	Jardim Botânico	38	Navegantes	58	São Caetano	78		
Centro	19	Jardim Carvalho	39	Nonoai	59	São Geraldo	79		
Chácara das Pedras	20	Jardim Europa	40	Parque Santa Fé	60	São João	80		

As observed, the maps of the places of residence and places of death of young homicide victims change over the time series analyzed. Regarding the distribution of victims' homes across the city, 6 neighborhoods emerge as the places where most of the young people lived: "Restinga", "Santa Tereza", "Rubem Berta", "Sarandi", "Lomba do Pinheiro" and "Mario Quintana". In 2018, "Restinga, "Rubem Berta",

"Sarandi" and "Lomba do Pinheiro" remain in the position of neighborhoods where there is the largest concentration of murdered youth residences. It is possible to verify, however, a higher incidence in relation to "Bom Jesus" and "Partenon" neighborhoods instead Tereza" "Santa and "Mario Quintana" neighborhoods.

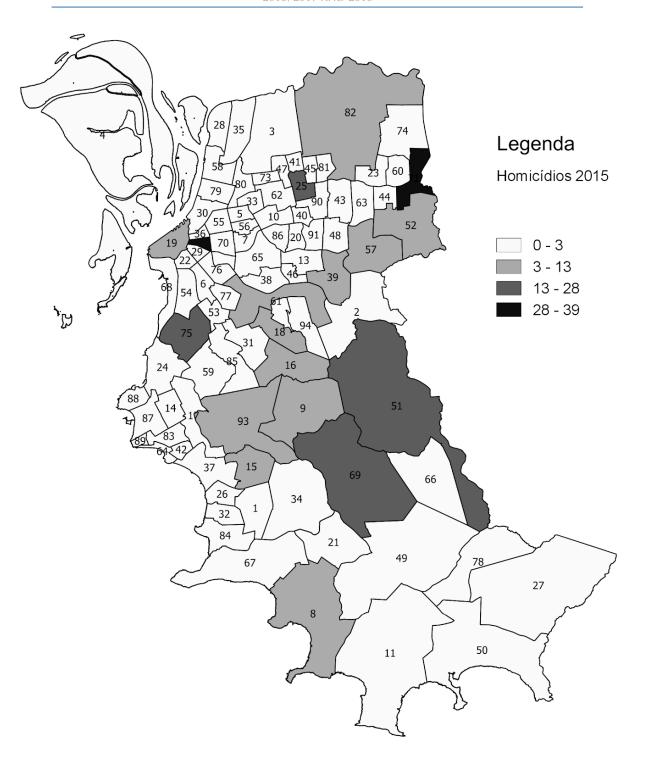
Table 4: Distribution of residence of young homicide victims in the neighborhoods with the highest incidence

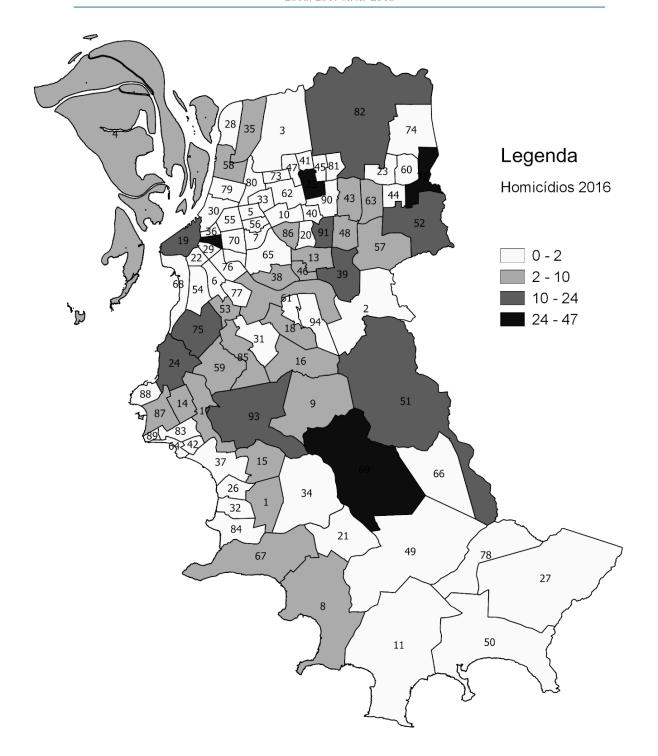
	Restinga	Santa Tereza	Rubem Berta	Sarandi	Lomba do Pinheiro	Mario Quintana	% do Total
2015	37 (10,5%)	33 (9,4%)	43 (12,3%)	16 (4,6%)	23 (6,6%)	27 (7,6%)	51
2016	51 (10,9%)	23 (4,6%)	43 (9,2%)	35 (7,5%)	23 (4,9%)	26 (5,6%)	42,7
2017	37(10, 2%)	18 (5%)	32 (8,8%)	19 (5,3%)	24 (6,6%%)	22 (6,1%)	41,2
2018	26 (9,2%)	13 (4,6%)	34 (12%)	20 (7,1%)	21 (7,4%)	10 (3,5%)	43,8

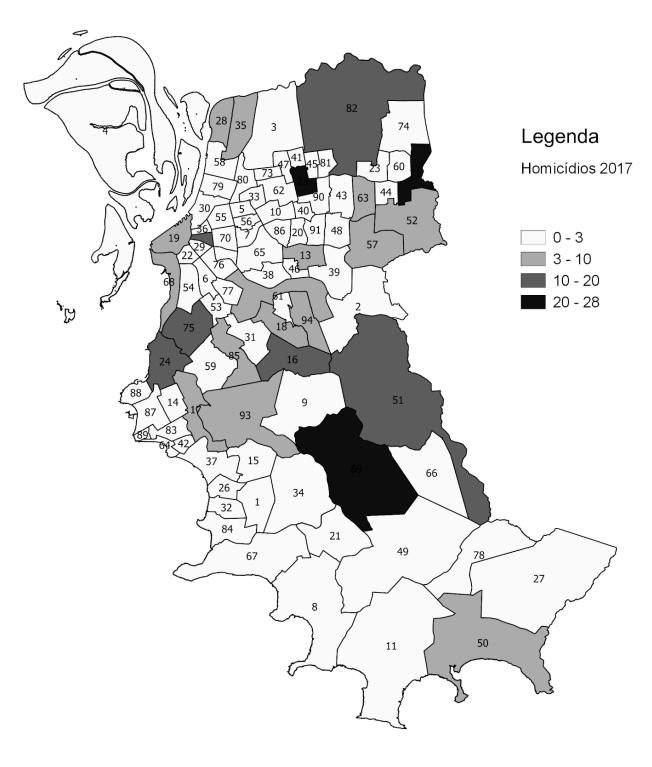
The table above shows the absolute numbers of young victims of homicide and, in parentheses, the representation of this number in total homicides. The "Rubem Berta" neighborhood appears as the main place of residence in 2015 and 2018, and "Restinga" neighborhood has the highest rates in 2016 and 2017 (both in relation to the absolute number and proportionally). There was also a considerable decrease in the concentration of youth residence over the years: if in 2015 the 6 territories together represented 51% of all young people murdered, demonstrating a spatially concentrated social phenomenon, in 2017, this number falls to 41.2%, later increasing in 2018 to 43,8%. Thus, although there is over the years a concentration of murdered youth residences in the "Restinga", "Rubem Berta". "Sarandi" and "Lomba do Pinheiro" neighborhoods, in 2018, the spatial dynamics changed to include among the neighborhoods with the highest concentration of residences also "Bom Jesus" and "Partenon" neighborhoods.

As has been shown, even though there is a very significant concentration in certain territories, the places of residence of the victimized youth are spreading to other territories, which seems to be an indicative of some new explanatory factor of lethal youth violence, still lacking in understanding. Thus, the indication of the decrease in the total amount of voung homicide victims in 2018 is accompanied by a map of the city, in which the residences of such subjects, although in large part are still located in neighborhoods known for their high rates. of lethal violence, are also distributed in spaces

that until then had not been losing so many young people to violent mortality. To better understand this "new" scenario, it is necessary to observe the city maps referring to the "places of death" of these young people, that is, places identified by SIM as the areas of occurrence of most part of the violent events.







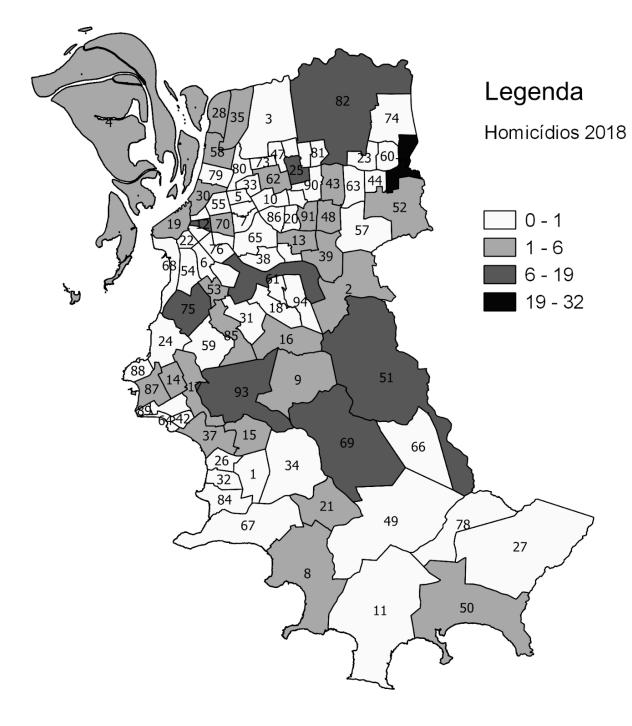
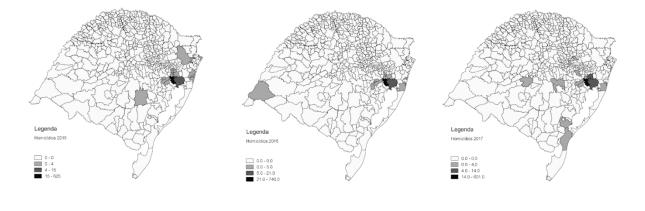


Image 2: Territories where homicides of young residents of Porto Alegre occurred

Regarding the incidence of homicides of young residents, it is clear that the majority of these occurred in Porto Alegre: in 2015, 92.2% of cases occurred in the city, with an increase to 92.9% in 2016, and a decrease to 90.9% in 2017 and to 88% in 2018. The other homicides were registered in places outside the city, in the metropolitan region, mountains, the coast of Rio Grande do Sul, and even in other states of the country.

Regarding occurrences outside Rio Grande do Sul, there were no records in 2015. In 2016, 1 case was registered in Osasco (SP). In 2017, 1 case in Vilhena (RO) and 5 cases in cities of Santa Catarina, proportional to 0.9% of homicides in the period. In 2018, only 1 case in in Santa Catarina was verified. The other homicides were recorded in cities of Rio Grande do Sul, as shown in the map below:



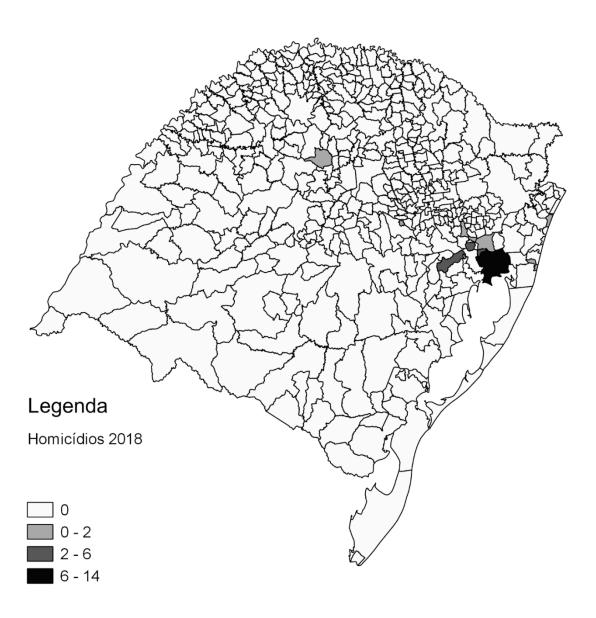


Image 3: Distribution of homicides of youths residing in Porto Alegre in the state of Rio Grande do Sul

Most of these occurred in the metropolitan region of Porto Alegre, in the cities of "Alvorada", "Gravataí" and "Viamão". In 2015, 9 homicides were rehistered in "Alvorada" (1.3%), 3 in "Gravataí" (0.4%) and 15 in "Viamão" (2.2%). In 2016, there was an increase in cases in "Alvorada", with 21 reported deaths (2.6%), while "Gravataí" and "Viamã" o recorded a slight decrease in proportional distribution (0.2%; 1.6%) of cases. In 2017, there was a decrease in the frequency of homicides in "Alvorada", which had 10 homicides (1.5%), and an increase in "Gravataí", with 10 reported deaths (1.5%), while "Viamão" maintained the average of other years (2.1%). In 2018, there is a decrease in the frequency of homicides in "Gravataí" and "Alvorada", amounting, respectively, to only 2 (0.7%) and 6 (6.1%) homicides. while "Viamão" registered 14 homicides (4.9%).

Regarding the occurrences recorded in the city of Porto Alegre, 7 neighborhoods emerge as the places with the highest concentration of homicides: "Rubem Berta", "Bom Fim", "Cristo Redentor", "Restinga", "Santa Tereza", "Lomba do Pinheiro" and "Sarandi".

Table 5: Distribution of homicides among young people in neighborhoods with higher incidence

	Rubem Berta	Bom Fim	Cristo Redentor	Restinga	Santa Tereza	Lomba do Pinheiro	Sarandi	% total
2015	35 (10%)	39(11,1%)	28 (8%)	25(7,1%)	27 (7,7%)	19 (5,4%)	13 (3,7%)	53
2016	47(10,1%)	33 (7,1%)	33 (7,1%)	30 (6,4%)	22 (4,7%)	21(4,5%)	24 (5,2%)	45
2017	28 (7,8%)	20 (5,5%)	23 (6,4%)	28 (7,8%)	18 (5%)	16 (4,4%)	15 (4,2%)	41
2018	32 (11,3%)	16 (5,65%)	16 (5,65%)	11 (3,9%)	9 (3,2%)	19 (6,7%)	15 (5,3%)	41,7%

The table above shows in absolute numbers the number of homicides in each neighborhood and, in parentheses, the representation of this number regarding the total amount of homicides in the city. Given these data, it is possible to observed that the neighborhood "Bom Fim" appears as the main homicide site in 2015, while the neighborhood "Rubem Berta" has the highest rates in 2016, 2017 and 2018, both in absolute numbers and proportionally.

It turns out that the 39 cases of homicides in "Bom Fim" in 2015 were registered in the hospital. The same occurred in relation to the "Cristo Redentor" neighborhood, regarding its 28 recorded cases. The pattern was repeated over the next three years (all deaths in both neighborhoods occurred in the hospital). Thus, a first relevant issue concerns the registration standards used in the death certificates. A significant number of homicide cases were reported to have occurred in the hospital neighborhoods where the victims were treated, which produces a distortion in SIM data. These are events that end up having their location unknown, making the territorial analysis of homicides in the city difficult.

Compared to the places of residence, 5 of them also appear among the places with the highest incidence of homicides: "Restinga", "Santa Tereza".

"Rubem Berta", "Sarandi", "Lomba do Pinheiro". Among these, we highlight the "Rubem Berta neighborhood", which, over all the years studied, had the highest concentration of murdered residents (152) and the highest amount of homicides among young people (142) in absolute numbers. Immediately thereafter, the highest concentration of murdered residents (151) and the highest incidence of homicides (94) occurs in Restinga. Thus, it is clear that these two spaces emerge in the spatial context of the city of Porto Alegre as Territories of Death, as they have the largest concentration of places of life and death of young people who were murdered in the years studied.

#### IV. Conclusion

Initially, the research sought to demonstrate the profile of homicide victims living in the city of Porto Alegre, identifying the criteria that make an individual more vulnerable to suffer this type of lethal violence. From the analysis of the obtained data, three criteria were identified as most relevant: (i) age; (ii) sex; and (iii) race. A first possible conclusion, therefore, confirms other studies already conducted, in which it was found that the profile of homicide victims consists of three basic characteristics: male, young, black.

Regarding the city of Porto Alegre, it was found that more than half of the homicide victims are young, aged between 15 and 29 years. The year of 2016 had the largest representation of youth in all homicides, corresponding to 58%. Moreover, in the four years analyzed, a higher concentration of victims aged between 15 and 19 years was observed, which was not the reality shown in the researches conducted in the city in 2006 (RUSSO; SANTOS, 2010). Thus, it seems apparent that the victims are increasingly young, which reveals a panorama of the first phase of adolescence very exposed to homicidal violence.

Regarding gender distribution, it is clear that the absolute majority of youth homicides involved male individuals. The proportional concentration of homicides among men is evident, and remained around 90% over all the years studied. However, there was a decrease in the concentration of events among young men over the years and the consequent increase in the number of cases among young girls. This scenario seems to indicate a greater importance of femicide cases in the total amount of violent deaths in the city, as well as the reconfiguration of homicidal events reaching more girls or women.

Regarding the racial profile of murdered youth, it is clear that, although the population in the city of Porto Alegre is predominantly white - 79.23% of white people, compared to only 20.24% of black people -, the percentage of young black people murdered was 36.1% in 2015, increasing to 40.3% in 2016, reaching the level of 46.5% in 2017, and increasing to 47.1% in 2018. This represents a percentage increase of 11% over the years studied. The upward trend in mortality rates among black youth, and the decrease in white youth, shows the substantial difference in the life trajectories faced by each of these groups: it is as if they lived "in different cities" or, in in other words, in a territory that makes them vulnerable to racial criteria. Such criterion is the only one that shows a significant upward curve and, therefore, seems to be one of the most relevant to be observed in the fight against mortality and violence among voung people.

Regarding the places of life and death of young people in Porto Alegre, it is found that the absolute and proportional majority of homicides - around 90% over the years studied - are concentrated in the city of Porto Alegre, followed by the metropolitan region (Alvorada, Gravataí and Viamão). Regarding the city of Porto Alegre, 6 neighborhoods emerge as the places where the most murdered youths reside, 5 of these also appearing as places where most part of young residents of Porto Alegre died. These 5 territories in common -"Rubem Berta", "Restinga", "Santa Tereza", "Sarandi" and "Lomba do Pinheiro" - are therefore the most risky places for young people in the city of Porto Alegre.

Thus, although there is an increasing dispersion of the places of life and places of death in the city's neighborhoods, the concentration of events in these 5 territories was not less than 30% in the four years studied, which shows a very strong focus neighborhoods victimized by violent deaths in the city. It seems evident that there is a need to concentrate public policy efforts for better assistance in these places, already marked by very precarious levels of social development.

Also noteworthy is the fact that the "Mario Quintana" neighborhood in the first three years studied had significant rates of young homicide victims who lived there, with an average of 6.5% in relation to the other neighborhoods in the city. However, the homicide rate in the neighborhood remained close to 3%, indicating that young people living in Mario Quintana ended up being murdered elsewhere. One possible explanation for this distortion may be in the identification of many death events in the neighborhoods "Bom Fim" and "Cristo Redentor", since these are the hospital locations where victims were taken to.

Another noteworthy circumstance is the "shift" in the spatial dynamics of residential and homicide distribution. This has been the case in 2018, observed, for example, in the residence concentration decrease verified in "Mario Quintana" and "Santa Tereza" neighborhoods, to the detriment of the growth observed in "Bom Jesus" and "Partenon" neighborhoods. The "Vila Nova" neighborhood also appears in 2018 as a place with higher incidence of homicides, amounting to the same frequency and same percentage verified in "Santa Tereza" neighborhood. Further studies should be conducted in the coming years to see if these trends can be verified.

Finally, it is worth reinforcing the argument previously presented that the present research does not seek to point out causal factors of homicides in the city of Porto Alegre, but rather to indicate important characteristics of the victims' profiles, as well as to present a spatial representation of the places of life and death of these events. In spite of the possible relevant factors in explaining the increase in homicides, and their greater dispersion throughout the city - such as the reconfiguration of drug trafficking that took place in the city in 2016 (CIPRIANI, 2017) - more in-depth qualitative research would be needed to clarify the complexity of these events. Thus, it is expected that the present research will contribute as a first analysis of the scenario, but that new social investigations on the subject will also be carried out, attentive to the reality of the state capital.

### References Références Referencias

1. CERQUEIRA, Daniel. et al. Atlas da Violência 2018. Rio de Janeiro: Fórum Brasileiro de segurança pública., 2018.

- . Atlas da Violência 2017. Rio de Janeiro: Fórum Brasileiro de segurança pública, 2017.
- 3. CERQUEIRA, Daniel; COELHO Danilo Santa Cruz. Democracia racial e homicídios de jovens negros na cidade partida. Brasília: IPEA, 2017.
- DE CASTRO CERQUEIRA. Daniel Ricardo: DE MOURA, Rodrigo Leandro. Vidas perdidas e racismo no Brasil. Publicatio UEPG: Ciências Sociais Aplicadas, v. 22, n. 1, p. 73-90, 2014.
- 5. CIPRIANI, Marcelli. Segregação Sócio-espacial e territorialidades do tráfico de drogas: as "facções criminais" diante do espaço urbano. Revista Conversas e Controvérsias, Porto Alegre, v. 3, n. 2, p. 5–28, 2017.
- 6. DIRK, Renato; MOURA, Lílian de. As motivações nos casos de letalidade violenta da Região Metropolitana do Rio de Janeiro. Cadernos de Segurança Pública, v. 9, n. 08, 2017.
- 7. FEE, Fundação de Economia e Estatística. Estimativas Populacionais (Revisão 2018). Acesso em: 14.01.2019. Disponível em: <a href="https://www.fee">https://www.fee</a>. rs.gov.br/indicadores/populacao/estimativaspopulacionais-revisao-2018/>HIRSCHI, 1969.
- 8. LEMGRUBER, Julita. "Os nu meros da violencia". In: MENDES, Candido & FEGHALI, Jandira. Reflexões sobre a violencia urbana: (in)segurança e (des)esperanças. Rio de Janeiro: Mauad X, 2006.
- 9. LIMA. Renato Sérgio, et al. Índice de Vulnerabilidade Juvenil à Violência 2017. São Paulo: Fórum Brasileiro de Segurança Pública, 2017.
- 10. MINAYO, Maria Ceci lia de Souza. "A violencia dramatiza causas". In: MINAYO, Maria Ceci lia de Souza & SOUZA, Edinilsa Ramos de. (orgs.). Violencia sob o olhar da sau de: a infrapolitica da contemporaneidade brasileira. Rio de Janeiro: Editora Fiocruz, 2003.
- 11. PROVENZA, M. M.; et al. Homicídio Doloso na Cidade do Rio de Janeiro: Uma comparação entre as bases da segurança e da saúde. Dilemas, vol. 10, n. 2, 2017.
- 12. RUSSO, Mauricio Bastos; SANTOS, José Vicente Tavares Dos. Cartografia Social dos Homicídios em Porto Alegre (2002-2006). O público e o privado. v. 15, p. 211–237, 2010.
- 13. SINHORETTO, Jacqueline; MORAIS, Danilo de Souza. Violência e racismo, novas faces de uma afinidade reiterada. Revista de Estudios Sociales, n. 64, p. 15-26, 2018. SOARES, 2000
- 14. SOARES, Gláucio Ary Dillon. Não matarás: desenvolvimento, desigualdade e homicídios. Rio de Janeiro: Ed. FGV, 2008.
- 15. WAISELFISZ, J.J. Mapa da Violencia 2011: Os jovens do Brasil. São Paulo /Brasília, Instituto Sangari/MJ, 2011.

- Violencia Мара da 2013: 16. Homicídios e Juventude no Brasil. Brasília. FLACSO/CEBELA, 2013. WALTER-LANG, 2001
- 17. Fórum Brasileiro de Segurança Pública. Anuário Brasileiro de Segurança Pública. 11º Edição. São Paulo: Fórum Brasileiro de Segurança Pública, 2017.
- Anuário 18. Brasileiro de Segurança Pública. 12º Edição. São Paulo: Fórum Brasileiro de Segurança Pública,
- 19. Anuário Brasileiro de Segurança Pública. 13º Edição. São Paulo: Fórum Brasileiro de Segurança Pública, 2019.