

Luoghi di vita e di morte: distribuzione spaziale e visibilità dei giovani residenti vittime di omicidio a Porto Alegre (Brasile)

Lieux de vie et de mort : distribution spatiale et visibilité des jeunes résidents victimes d'homicides à Porto Alegre (Brésil)

Places of Life and Death: Spatial Distribution and Visibility of Juvenile Residents Who Were Victims of Homicide in Porto Alegre (Brazil)

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Riassunto

L'obiettivo dell'articolo è quello di presentare la rappresentazione spaziale degli omicidi che si sono verificati a Porto Alegre negli anni 2015-2018. Sulla base dei dati ricavati dal Sistema Informativo della Mortalità (SIM), gestito dal Dipartimento della Salute del comune di Porto Alegre, questo studio intende delineare i profili delle vittime, relativi alla loro età, genere ed etnia, e analizzare la distribuzione spaziale degli omicidi nella città. In tal modo, è stato possibile ribadire il fatto che le vittime di omicidio sono prevalentemente giovani di sesso maschile e con la pelle nera. Diversamente da quanto succedeva dieci anni fa, la curva dell'età mette in evidenza un aumento delle vittime di età compresa tra i 15 ed i 19 anni. Inoltre, le curve relative all'etnia e al genere presentano una diminuzione proporzionale delle vittime bianche e un leggero incremento delle persone di sesso femminile. Infine, riguardo ai luoghi di vita e di morte dei giovani uccisi, la concentrazione degli eventi continua a registrarsi nei quartieri Rubem Berta, Restinga, Santa Tereza, Sarandi e Lomba do Pinheiro.

Résumé

L'objectif de cet article est de proposer la représentation spatiale des homicides commis à Porto Alegre entre 2015 et 2018. Sur la base des données fournies par le *Mortality Information System* (SIM) du Service Municipal de santé, l'article donne un profil des victimes – en ce qui concerne l'âge, le genre et la race – et analyse la distribution spatiale des homicides dans la ville. Par conséquent, il a été possible de réaffirmer que les victimes des homicides sont surtout des jeunes hommes noirs. La courbe des âges démontre l'augmentation du nombre de victimes âgées de 15 à 19 ans, ce qui n'était pas le cas il y a à peine une décennie. De plus, les courbes des races et des genres mettent en évidence la baisse proportionnelle de victimes blanches et une légère hausse de femmes. Enfin, à propos des lieux de vie et de mort des jeunes tués, ces événements continuent de se produire dans les quartiers Rubem Berta, Restinga, Santa Tereza, Sarandi et Lomba do Pinheiro.

Abstract

The paper aims to develop a spatial representation of homicides that occurred in Porto Alegre between the years 2015 and 2018. Based on data from the Mortality Information System (SIM), organized by the Municipal Health Department, the paper traces the profile of the victims - regarding age, gender, and race - and analyses the spatial distribution of the homicides in the city. Thus, it was possible to reaffirm the idea that homicides mainly victimize young black males. The age curve demonstrates the increase of victims aged between 15 and 19 years old, which was not a reality a decade ago. Also, the race and gender curves demonstrate a proportional decrease of white victims, and a slight increase in female representation. Finally, regarding the life and death places of the murdered youth, the concentration of events still occurs in the Rubem Berta, Restinga, Santa Tereza, Sarandi, and Lomba do Pinheiro neighborhoods.

Key words: youth, homicide, violence, spatial distribution; territory.

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1. Introduction.

“Porto Alegre is listed among the most violent cities in the world” (1) is the april 2nd, 2017 headline of ZERO HORA, the newspaper with the largest circulation in the region. Since the previous year, several news reports acknowledge a scenario of vertiginous increase regarding the episodes of lethal violence in the state capital, with emblematic cases that even caused changes in city administration, such as the intervention of the Nacional Force in aid to the Military Police (2).

Nevertheless, several concerns must be addressed in order to fully comprehend the process of lethal violence in Porto Alegre. Despite the existence of important initiatives, such as the RBS Group electronic platform “X-Ray of Violence”, few researches are concerned in assessing who are the people subjected to the greatest risk of suffering homicide. As follows, the present article traces some first considerations, identifying the profile of the victims and the neighborhoods in which they lived and died, in the years of 2015, 2016, 2017 and 2018.

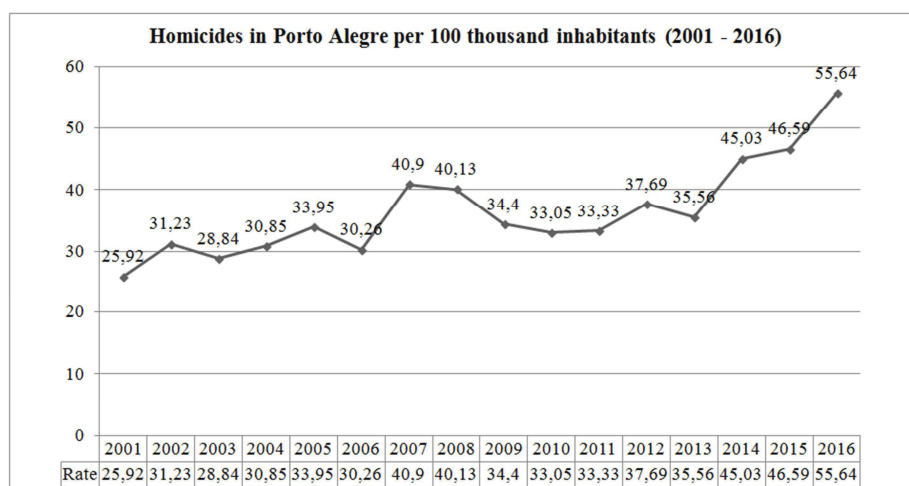
The research used data collected by the Health Department of Porto Alegre (SMSPA), organized in the Mortality Information System (SIM). The information was quantified using data processing software, which allowed the construction of graphic and cartographic representations of the homicidal events. The first part of the article addresses the process of lethal victimization in Porto Alegre,

presenting the data provided by SIM from 2001 to 2018. The second part of the article traces the profile of the murdered youth, presenting the distribution of the lethal events, considering the places of life (residence) and death (homicide) of the victims (3).

The paper contributes to the vulnerability assessment of brazilian youth, which, as will be seen, can be translated in a process that does not affect all young people with the same intensity. Nonetheless, more than demonstrating numbers and statistics regarding the subject, the paper offers an overview - albeit an initial one - of the lethal violence patterns verified in Porto Alegre, allowing those who are subjected to the greatest risk of suffering the damaging consequences of the process to be seen and understood from their socio-spatial reality.

2. Lethal violence and youth victimization process in Porto Alegre: A general overview

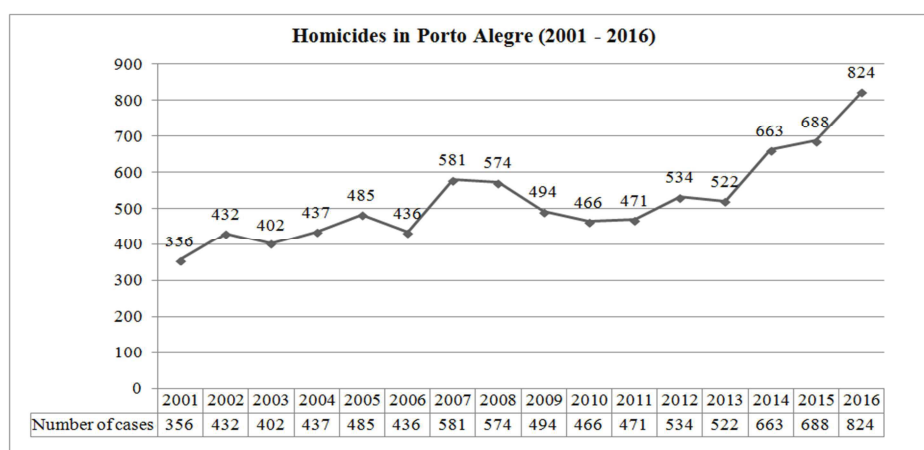
Violent mortality, although may appear as an ever-present circumstance of modern life, is a complex process of multiple causes and dimensions, which, in a country the size of Brazil, presents itself in localized realities. The data (4) provided by the Institute of Applied Economic Research (5) reveal an overview regarding the scenario of generalized violence placed in the city of Porto Alegre:



Source: Institute of Applied Economic Research (IPEA, 2019)

Datas show that as of 2002, at least one person was killed per day in Porto Alegre. In recent years, the number of homicides raised, reaching up to more

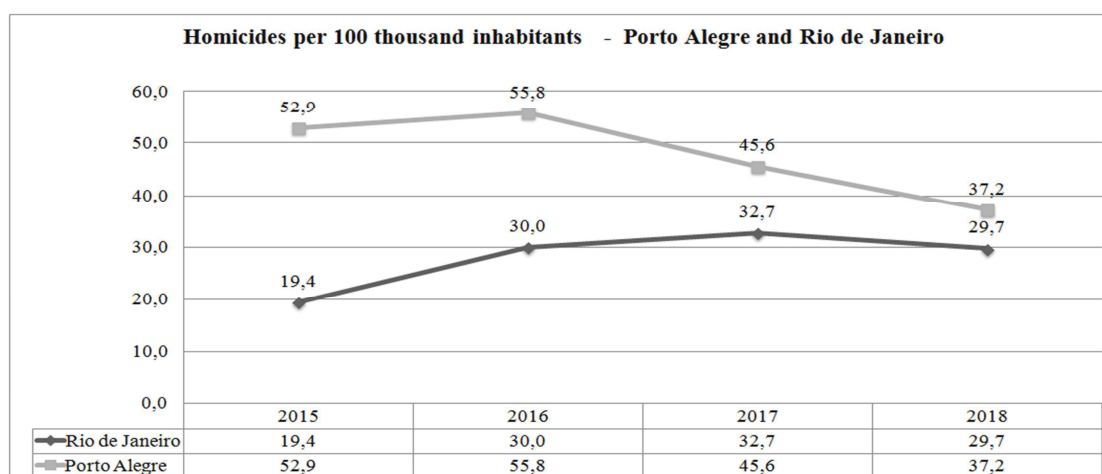
than two deaths per day in 2016. The rates also point to a significant increase in cases of homicide, especially between 2013 and 2016.



Source: Institute of Applied Economic Research (IPEA, 2019)

Along this lines, the Public Safety Yearbook (FBSP, 2018) points out the momentous increase in homicidal events over the last decade, especially

compared to other important capitals of Brazil, such as Rio de Janeiro.

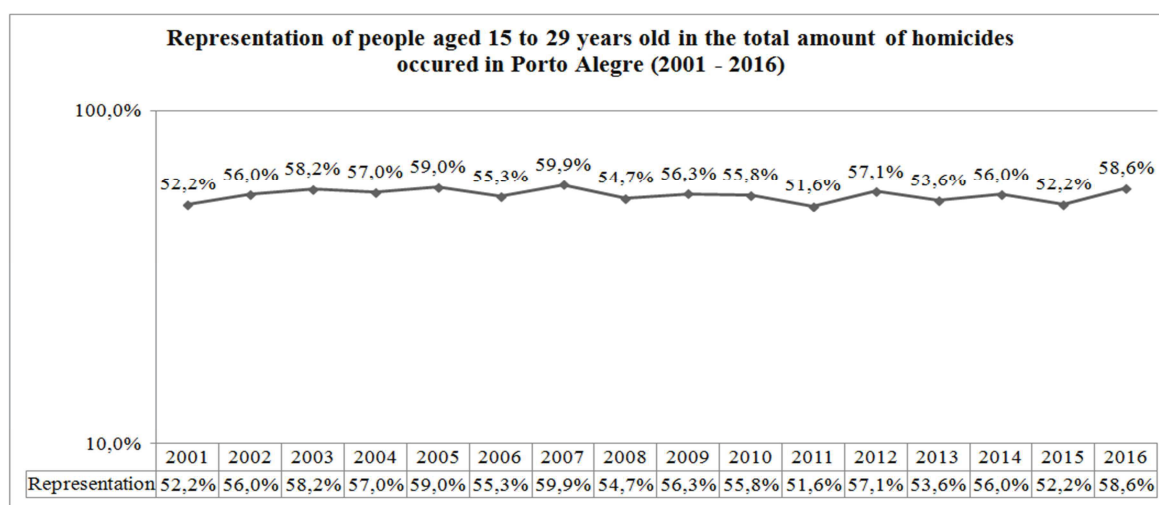


Source: *Public Safety Yearbook (FBSP, 2018)*

The State capital, known by common sense as a place of pervasive violence, registered 42.3 homicides per 100 thousand inhabitants in 2006, which is well over the 30.9 rate registered in Porto Alegre at the time. However, just a few years later, the rate for intentional violent deaths in Rio de Janeiro ranged from 19.4 (2015), 30.0 (2016), 32.7 (2017) and 29.7 (2018), whereas Porto Alegre presented much higher rates, evaluated at 52.9 (2015) 55.8 (2016) 45.6 (2017) and 37.2 (2018) per 100 thousand inhabitants (FBSB, 2017; 2018; 2019). Thereupon, lethal violence in Porto Alegre remained high within national level, which can certainly be perceived in the daily lives of the population, especially young people.

3. Youth at gunpoint: young people who are under the risk of suffering homicide in Porto Alegre

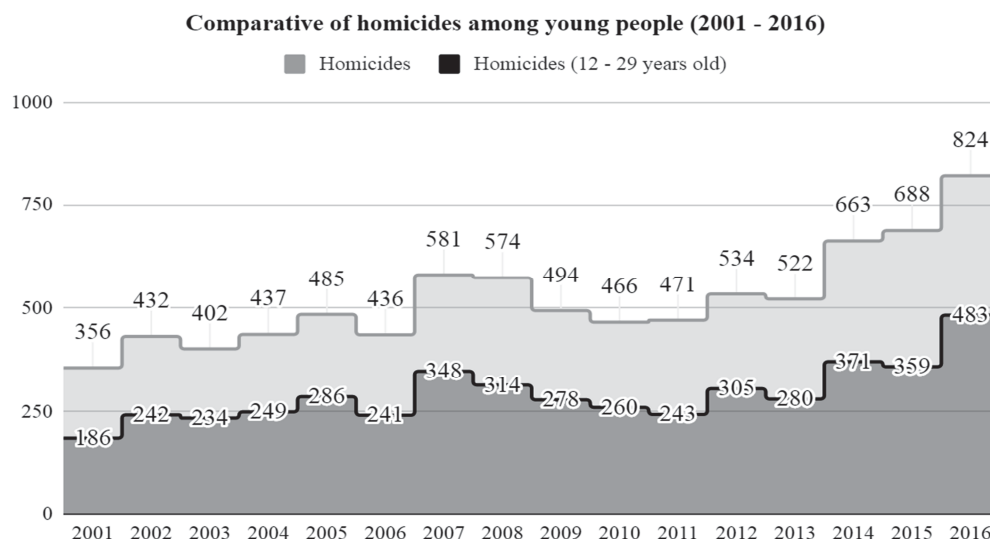
The process of lethal victimization of young people began in 1980 and has gradually established itself as one of the main obstacles to the advancement of minimum levels of public security in Brazil (Cerqueira, 2017, p. 25). The data from the Mortality Information System (SIM) indicates that young people aged 15 to 29 years old represent more than half of all homicide victims in Porto Alegre:



Source: *SIM / Porto Alegre Health Department*

The age range between 15 to 29 years old is the period of life in which people are at most risk of suffering homicide in Porto Alegre. Hence, it is possible referring to a youth victimization process, as the “limit condition in which specific sectors or groups of the young population are murdered”.

This process culminates in the “construction of youth bodies as privileged territories of death” (Valenzuela, 2005), meaning that lethal violence does not affect all sectors of youth with the same intensity: some young people are subject to a greater risk of suffering homicide.



Source: SIM / Porto Alegre Health Department

Considering that the social experience of being young is not experienced in the same way by all individuals, and that violence is a multifactorial process, it is possible that the lethal violence reaches individuals in different intensities and circumstances, creating risk patterns that vary, depending on who the person is and where they live. So, to better understand the vulnerability process within the city, it is necessary to draw some differentiations regarding the age, gender and race of the victims.

3.1 Profile of the victims

The Mortality Information System (SIM) comprise all natural and unnatural deaths occurred in Porto Alegre. The database provides sensitive information about the victims, such as name, race, gender, name of the relatives, circumstances of death and place of residence. The database also points out other relevant information, such as color and race, age and gender of the victims. For this reason, accessing some of the information pends the approval issued by the Ethics and Research Committee of both the Department of Health and UFRGS, the University responsible for the development of the research.

The SIM Data Dictionary allows the identification of all variables. The “CIRCOBITO” variable indicates all unnatural deaths, which are classified as either accident, suicide, murder, other cause or cause ignored. The sample selected for conducting the research considered only homicide victims residents of Porto Alegre (6), which were divided according to three criteria - age, gender and identification as white or non-white - using IBM SPSS (7). Finally, the last stage of the research identified the places of life and death of the victims. Thus, it was possible to develop cartographic representations indicating the spatial distribution of the events, using QGIS (8).

Type of death	Year			
	2015	2016	2017	2018*
All deaths	11.098	12.152	11.611	11.857
Homicides	688	824	715	661
Homicides (15 - 29 years old)	359	483	378	361
Homicides of residents of Porto Alegre (15 - 29 years old)	351	466	361	283

*Partial data

Table n. 1: *Sample Selection (source: SIM / Porto Alegre Health Department)*

The data analyzed regarding the profile of the victims is restricted to the last 4 years, counted from the date of completion of the study, namely, 2015, 2016, 2017 and 2018. Regarding the profile of homicide victims in Brazil, a vast theoretical framework in brazilian literature identifies young black males and residents of peripheral areas as the main subjects to this type of lethal violence (Minayo & Souza, 2003; Lemgruber, 2006). It is hoped that this initial analysis serves as grounds for further research embracing more extensive periods in time.

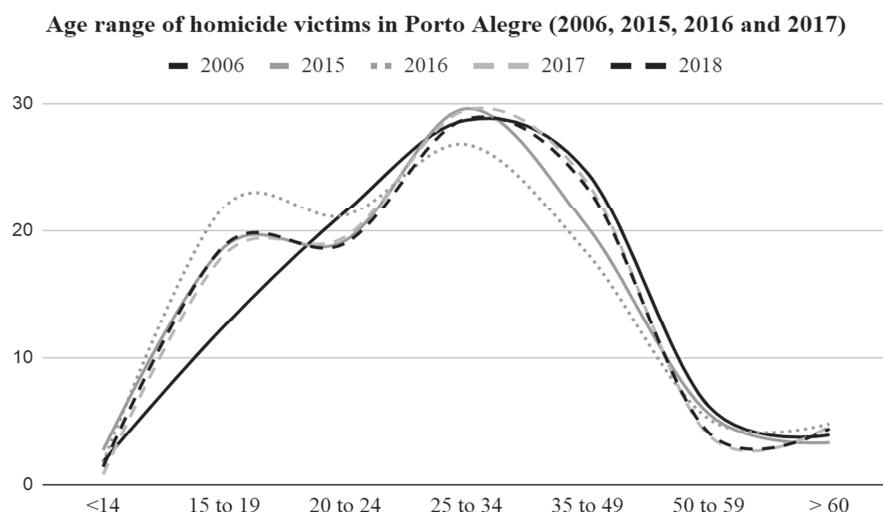
The first parameter of analysis concerns the age of the victims. Considering the age range that corresponds to the legal concept of youth, as provided by the Youth Statute (Law 12.852 of 2013) in its article 1, § 1, a first selection considered all young people aged between 15 and 29 years old. The choice for this age group, in addition to be in accordance with the legal definition, 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. To perform a temporal comparison, the research used the data from 2006, presented in the study by Santos and Russo (2010, pp. 211-237):

Age range	% of total homicides in Porto Alegre				
	2006*	2015	2016	2017	2018
Up to 14 years	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

Table n. 2: Age range of homicide victims in Porto Alegre (2006, 2015, 2016 and 2017) [source: SIM / Porto Alegre Health Department; Russo, Santos (2010)]

The actual representation of young people regarding the total amount of violent deaths in Porto Alegre seems to be more critical than it was in 2006, when the 25 to 34 age group represented the majority of

homicide victims (28,7%), followed by the 35 to 49 age group (24,6%). Homicides in the 15 to 24 range represented 34% of the total amount of victims at the time. Ten years later, the same age group corresponds to 43.1% of the total amount:



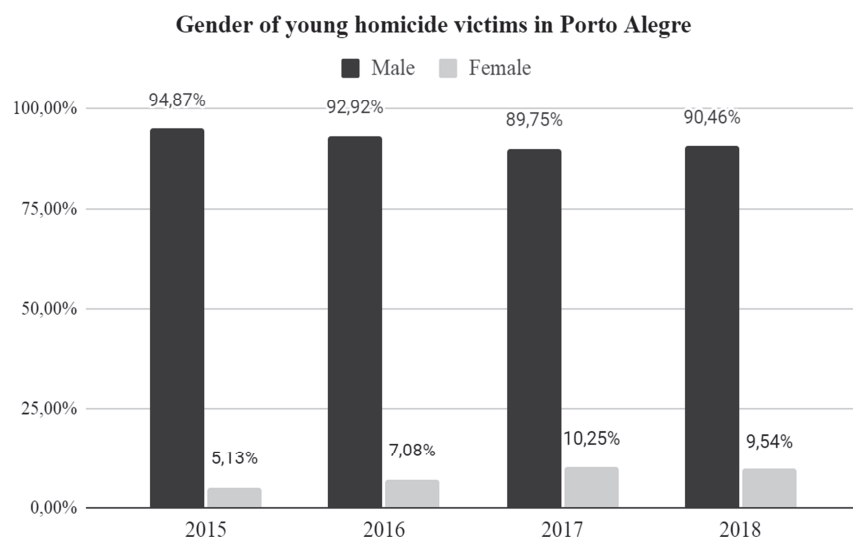
Source: SIM / Porto Alegre Health Department

The line graph above shows a significant change in the distribution of homicides ten years after the research published by Santos and Russo. In the period analyzed, the curve of the graph deforms and starts to show a peak in the age group of 15-19 years. Although data demonstrates that homicides continues to be more representative in the 25 to 34 age group, recent years present a new scenario that anticipates the occurrence of these deaths to a much earlier period in life.

3.1.2. Gender

There is a substantial difference in the frequency and percentage of homicides among young men and

women. Young men tend to be represented around 90% of homicide cases in all years. In 2015, out of the 351 young residents of Porto Alegre murdered, only 18 (5.1%) were female, while the other 333 (94.9%) were male. In the following year, the number of female victims was 33 (7.1%), while male victims were 433, representing 92.9% of the universe studied. In 2017, out of 361 homicides, 37 (10.3%) victimized young women, and 324 (89.7%) victimized young men. In 2018, out of 283 homicides, 27 (9.5%) victimized young women and 256 (90.5%) victimized men.

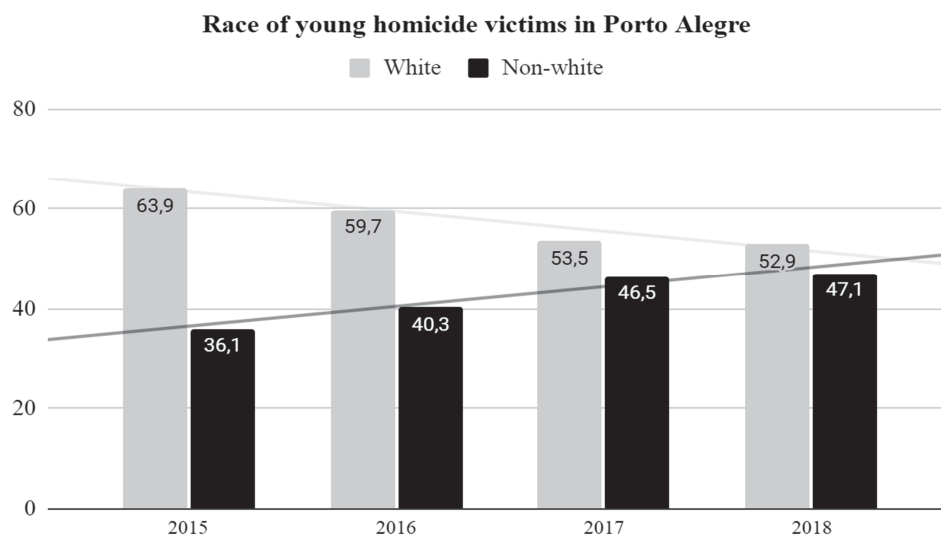


Source: SIM / Porto Alegre Health Department

3.1.3 Race

Although the population of Porto Alegre is predominantly white - 79.23% of the population is composed of white people, 20.24% of black people (9), 0.29% of yellow people and 0.23% of indigenous people (10) - the incidence of homicides among non-white people (11) is far more

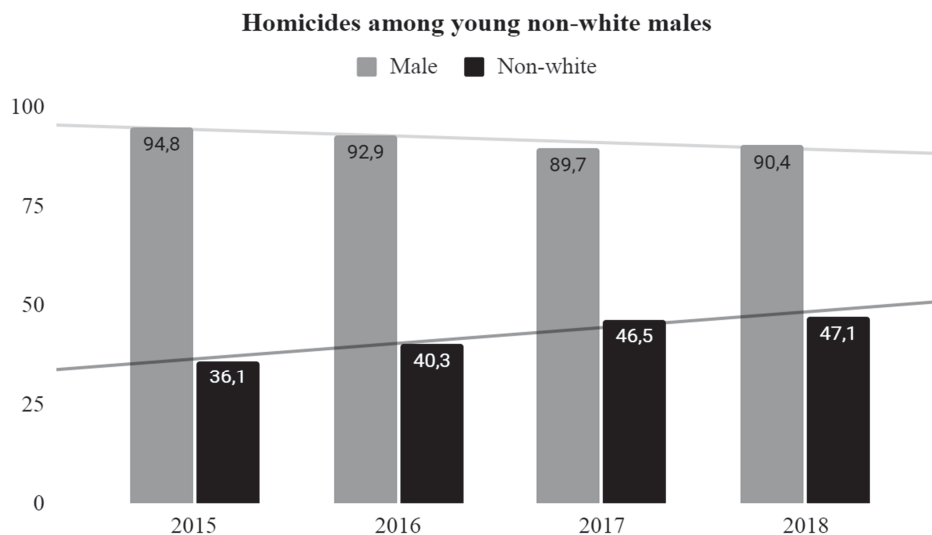
representative, and tends to increase over the years. In 2015, the percentage of young non-white people victim of homicide was 36.1% (221 homicides). In 2016, the rate reached 40.3% (270 homicides). In 2017, the percentage reached the level of 46.5% (192 homicides), and, finally, in 2018 the figure was 47.1% (146 homicides).



Source: SIM / Porto Alegre Health Department

Thus, two are the trends verified from the data collected. The upward curve of representation of

non-white young people is accompanied by a downward curve of the representation of men in the totality of victims.



Source: SIM / Porto Alegre Health Department

3.2 Who dies the most: young, non-white males

The higher incidence of homicides in the young population is not 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). Regarding the higher incidence of homicides among young men, gender is described in several studies as the socio-demographic feature that most influence the occurrence of homicides. Literature attribute different reasons for the phenomenon, some based on the premise that men, in general, commit more violence than women (Soares, 2008). Also, that boys are subjected to less social control than girls, which would contribute to greater involvement in criminal conducts (Hirschi, 1969); or even that due to the “socialization through violence”, men need to “neutralize” other men to affirm their own masculinity (Welzer-Lang, 2001).

The higher incidence of homicides among young men was already expected. A less expected tendency, which deserves attention, refers to the percentage of young women being murdered. Such

a phenomenon is still little explored and needs further debate. The increase in the number of women murdered can already be considered a trend in Rio Grande do Sul: data shows an increase of 90.1% of cases between 2006 and 2016. The same study attributes femicide as the main cause, without ruling out, however, the existence of other factors, such as greater involvement with drug trafficking (Cerqueira, 2018).

Regarding race, the highest percentage of homicides among non-white people calls into question the myth of racial democracy. According to this idea, racism in Brazil would be irrelevant, it would not block opportunities, prohibit careers, nor would it increase the chances of black individuals being murdered (Cerqueira, Coelho, 2017). In 2006 to 2016 there was a 23.1% increase in homicides among black people, and the mortality of non-black individuals decreased by 6.8%. In 2016, for example, the homicide rate of black people was two and a half times higher than the homicide rate among non-black people, representing only 16% against 40.2% (Cerqueira et al, 2018, pp. 33-40).

Young black males continue to be murdered every year as if they were living in a war zone, and the lethality against afro-descendants is even greater

among young people. As a person reaches 21 years old, the higher the chances of suffering homicide in Brazil. Black people and brown people have 147% more chance of being victimized by homicide than white people (Cerqueira, Coelho, 2017). The Youth Vulnerability Index (2017) also points out that, in 24 out of the 26 Federative Units in Brazil, the chances of a young black man dying is greater than that of a young white man (Lima et al, 2017). In 2015, for example, young black people were on average 2.71 more likely to die from homicide than young white people (Lima et al, 2017), whereas in Rio Grande do Sul the relative risk of a young black man being murdered in relation to a young white man was 1.3 (FBSP, 2017, p. 27) (12).

Sinhoretto and Morais (2018) state that the analysis of the available data on the phenomenon of violent death demonstrates that the racialization of black youth operates the dehumanization of subjects, making their death plausible and inconsequential. Furthermore, Cerqueira and Moura (2014) conclude that the search for explanations of violent deaths among young people cannot neglect racism: in addition to physical extinction, there are thousands of symbolic deaths behind the loss of opportunities, that many individuals suffer only because of their skin color. They are materially and symbolically the lost youth due to racism in Brazil.

3.3 Places of life and death

To locate youth homicides in the territorial space of the city, the research team developed maps as illustrative representations of the neighborhoods where young homicide victims lived and 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 (13) and quantitative data.

The maps produced can geographically demonstrate the distribution of the homicides. The shapelife was provided by the Porto Alegre City Hall, through its official website (14), which expresses the spatial limits of the municipality, and its official division into 94 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 of young residents of Porto Alegre.

The software allowed the production of a series of maps demonstrating which neighborhoods had the highest concentrations of residences of young people (places of life), and which had the highest incidence of homicides (places of death). The result was the production of color gradient maps ranging from black and white so that each tone represents a concentration, classified as low (white), intermediate (light gray), high (dark gray), and very high (black).

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 among the neighborhoods with the largest concentration of murdered youth residences, along with “Bom Jesus” and “Partenon” instead of “Santa Tereza” and “Mario Quintana” neighborhoods.



Image n. 1: Spatial Distribution of Homicides in Porto Alegre: Places of Life (Source: SIM / Porto Alegre Health Department)

Aberta Morros	1	Chapéu do Sol	21	Jardim Floresta	41	Partenon	61	São Sebastião	81
Agronomia	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
Arquipélago	4	Cristal	24	Jardim Leopoldina	44	Pedra Redonda	64	Serraria	84

Auxiliadora	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
Camaquã	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		
Cavallhada	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		

Table n. 3: *Neighborhood indication*

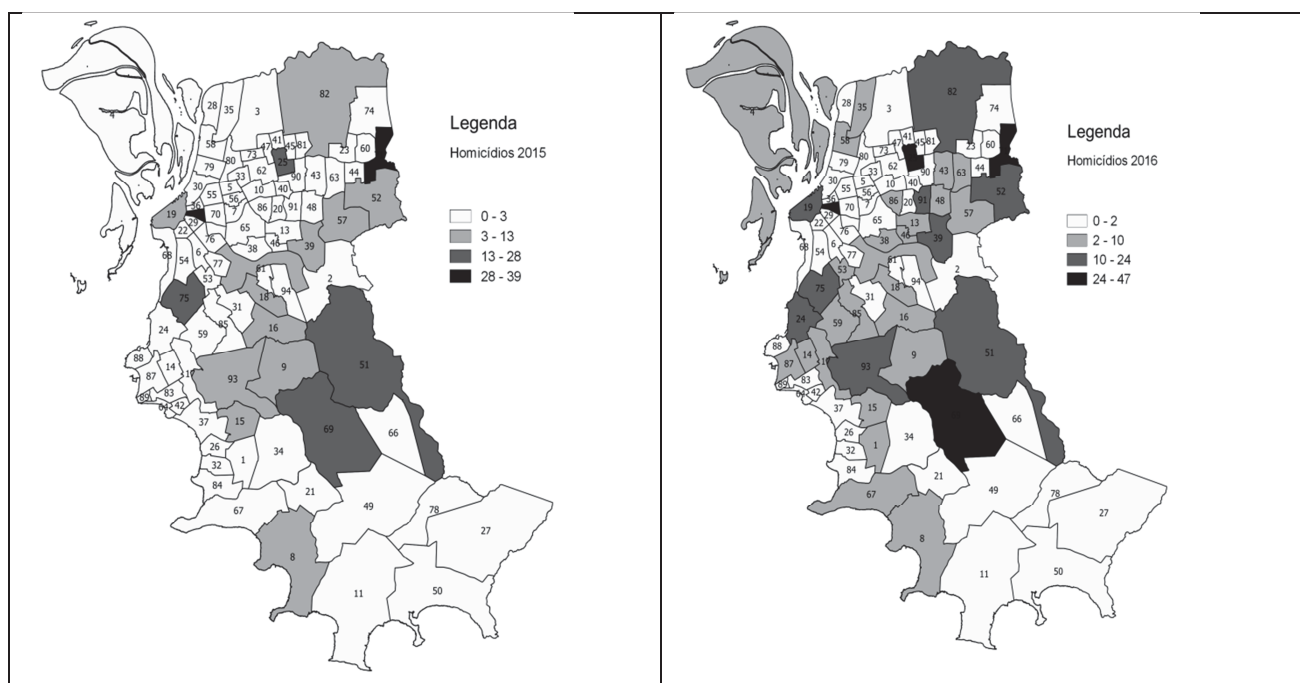
According to Image 1, “Rubem Berta” and “Restinga” neighborhoods appear as the main place of residence of homicide victims in all years studied. However, the spatial distribution of homicides are spreading over the last years studied: if in 2015 the 6 neighborhoods together represented 51% of all young people murdered, indicating a spatially concentrated social phenomenon, in 2016 the number falls to 42.7% and to 41.2% in 2017 - although it slightly increases in 2018.

In the last year studied, the residence of the subjects - although in large part are still located in locations

known for their high rates - are distributed in neighborhoods that until then had not been losing so many young people to violent mortality. In other words, the spatial dynamics changed to include among the neighborhoods with the highest concentration of residences “Bom Jesus” and “Partenon” neighborhoods. To better understand this new scenario, the research team developed maps identifying the areas of occurrence of the majority of homicides, that is, the “places of death”.

	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

Table n. 4: Places of life with the highest incidence of homicide among young people (source: SIM / Porto Alegre Health Department)



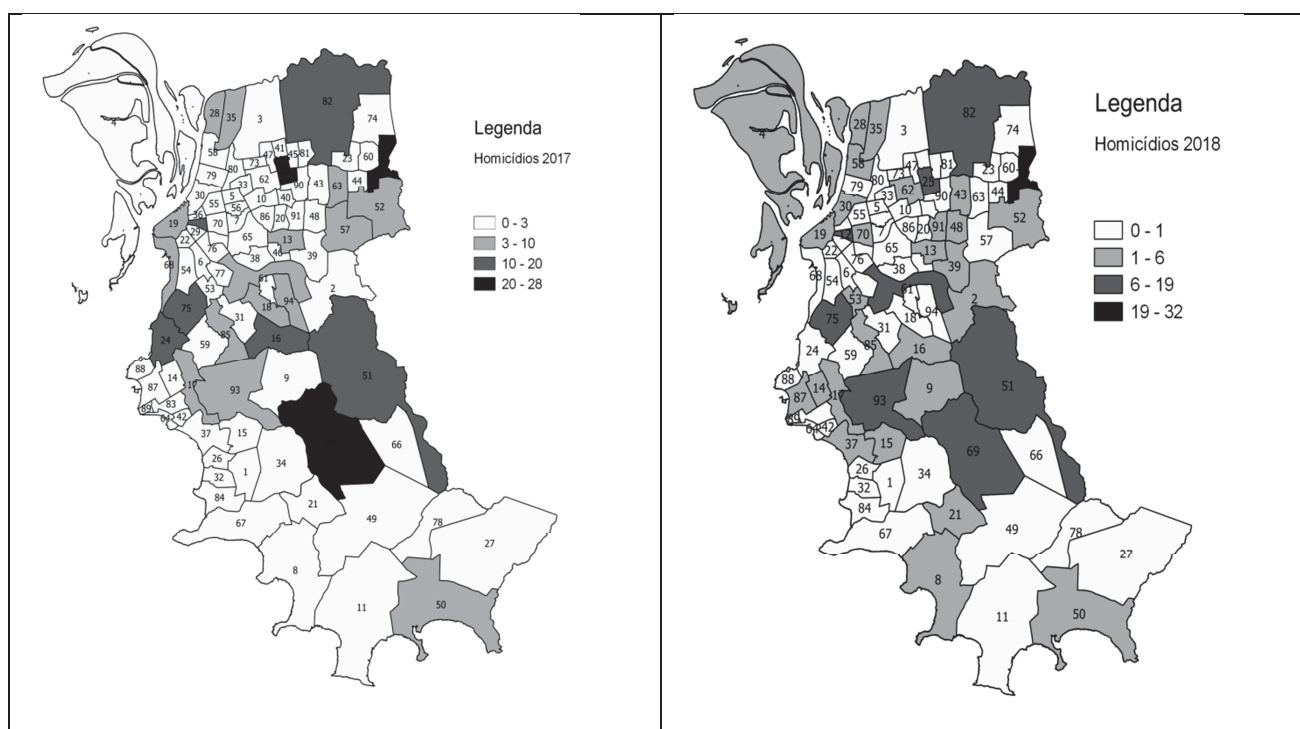
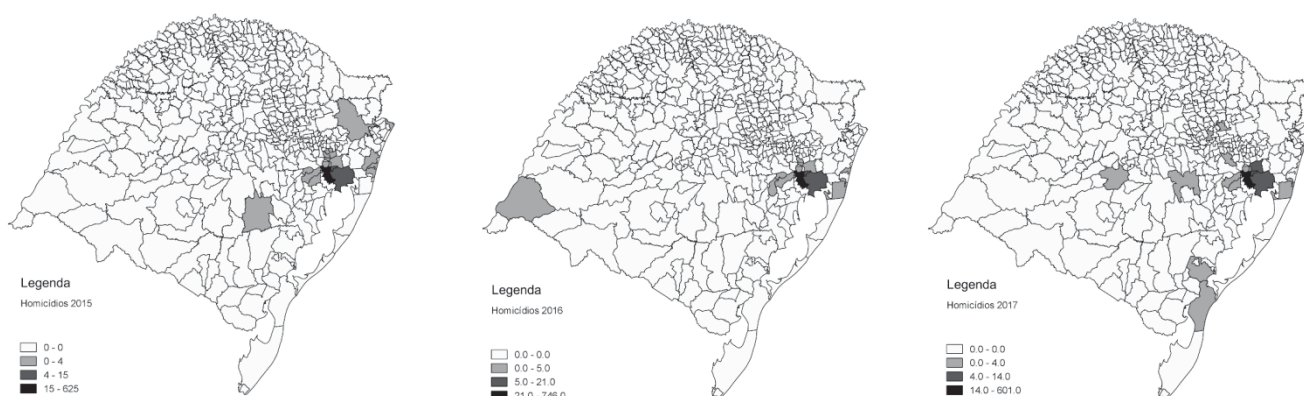


Image n. 2: Spatial Distribution of Homicides in Porto Alegre: Places of Death (source: SIM / Porto Alegre Health Department)

The majority of homicides occurred within city limits. However, some homicides took place outside Porto Alegre, on the outskirts of the city, or even in other Federative Units of the country, such as Osasco (São Paulo), Vilhena (Rondônia) and cities

of Santa Catarina. The cases outside Rio Grande do Sul represented less than 1% of the places of death. The majority of homicides taking place outside of Porto Alegre happened in the metropolitan region, in the cities of “Alvorada”, “Gravataí” and “Viamão”.



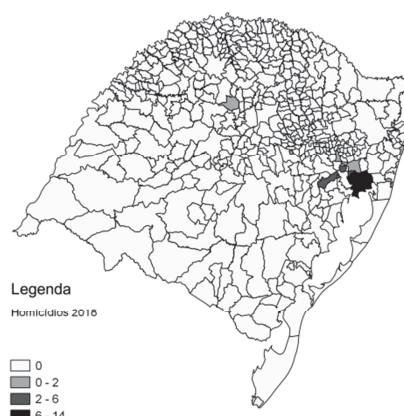


Image n. 3: *Spatial Distribution of Homicides outside of Porto Alegre: Rio Grande do Sul (Source: SIM / Porto Alegre Health Department)*

Regarding the occurrences recorded in the city of Porto Alegre, 7 neighborhoods emerge with the highest concentration of homicides: “Rubem

Berta”, “Bom Fim”, “Cristo Redentor”, “Restinga”, “Santa Tereza”, “Lomba do Pinheiro” and “Sarandi”.

	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

Table n. 5: *Distribution of homicides among young people in neighborhoods with a higher incidence (source: SIM / Porto Alegre Health Department)*

The neighborhood “Bom Fim” appears as the main homicide site in 2015, while “Rubem Berta” has the highest rates in 2016, 2017, and 2018, both in absolute numbers and proportionally. However, all 39 homicide cases recorded in 2015 in “Bom Fim” occurred inside hospitals (15). The same circumstance can be verified in “Cristo Redentor”

neighborhood, and in both cases the pattern repeats itself over the next three years.

Thus, the first relevant issue concerns the registration standards used in the Mortality Information System (SIM). A significant number of homicide cases have been placed in the neighborhoods where the victims were in fact brought to the hospital receive medical attention

(FBSP, 2017) producing a distortion in SIM data. These are events that end up having their location unknown, hindering the analysis of homicide distribution.

Comparing both places of life and death of the murdered youth, 5 neighborhoods appear among the highest positions: “Restinga”, “Santa Tereza”, “Rubem Berta”, “Sarandi”, “Lomba do Pinheiro”. “Rubem Berta”, however, stands out as the neighborhood with the highest concentration of residences (152) and homicides (142), followed by “Restinga”, with the second highest concentration of residences (151) and homicides (94). Thus, it is clear that these two neighborhoods emerge in the spatial context of Porto Alegre as territories of greater vulnerability for young people.

4. Conclusion.

In the city of Porto Alegre, homicide victims are becoming younger, evidencing a panorama in which subjects in the first phase of adolescence, aged 15 to 19 years, are more exposed to homicidal violence. The absolute majority of the victims are young man, and the percentage of homicides among non-whites is increasing whereas the homicide rate among whites is decreasing, which demonstrates the substantial difference in the life trajectories faced by each of these groups. Crossing these variables with the socio-spatial component brings a new perspective to the phenomenon of violent mortality: vulnerability is also a process developed at the territorial level. Investigating the spatial distribution of vulnerability is thus a prerequisite for the development of social protection policies.

Regarding places of life and death of young people in Porto Alegre, Rubem Berta, Restinga, Santa Tereza, Sarandi and Lomba do Pinheiro neighborhoods stand out as the areas of greatest

risk for young residents of Porto Alegre. Although it is possible to verify an increasing dispersion in the metropolitan region of the city, the concentration of events in these 5 neighborhoods was not less than 41% in all years studied. Being young and living in these neighborhoods is like living in a "different" city, where the risk of being murdered increases dramatically compared to other nearby neighborhoods.

The investigation of the socio-spatial context of homicide victims is still a task that offers several challenges. In addition to incomplete records, the Mortality Information System (SIM) database misinterprets some of the adolescents' places of death as the Hospital, which explains the distortion related to Bom Fim and Cristo Redentor neighborhoods. Despite recording some of the highest incidence, both neighborhoods cannot be considered “places of death”: living in these spaces does not pose a real risk because the individual was victim of lethal violence in another location.

A brief survey of major news newspapers did not yield results as to where these young people lived or where they were at the time of the event. In these circumstances, discovering the place of life or death reveals itself to be a complex task: it requires data from the police records of occurrences, and, therefore, another request for access to the Ethics Committee of all the institutions involved. This is a measure that aims to protect the identity of the people involved. However, one cannot fail to consider the condition of invisibility to which these - and several other adolescents - are subjected: they become lost lives that cannot be known or located, decontextualized numbers and names.

Finally, it is possible to verify some initial modification in the spatial distribution of residences and homicides over the last years studied. For

example, the concentration of residences in the neighborhoods Mario Quintana and Santa Tereza decreased whereas the concentration in Bom Jesus and Partenon neighborhoods increased. Also, Vila Nova neighborhood starts to concentrate a high incidence of homicides in 2018, to the same amount verified in Santa Teresa neighborhood. Finally, in recent years, there has been a greater distribution of homicides in the metropolitan region of Porto Alegre, in the cities of Alvorada, Gravataí and Viamão.

New studies should be conducted in the coming years in order to bring these trends into light. For the time being, it is possible to conclude that lethal violence does not reach all young people in the same way, as some circumstances can determine a greater propensity to suffer homicide. Violence has to be understood from a point of view that considers the particularities verified in the socio-spatial context being analyzed. In the case of Porto Alegre, being young, non-white and having your life linked to peripheral neighborhoods or the metropolitan region of the city can mean a trajectory marked by the systematic violation of human rights, causing the interruption of life at an increasingly younger age.

Notes.

(1) ZERO HOUR, "Porto Alegre é listada como uma das cidades mais violentas do mundo". Posted on 02/04/2017. Access on: 17. 09.2018. Available at:

<https://gauchazh.clicrbs.com.br/seguranca/noticia/2017/04/porto-alegre-e-listada-entre-the-violent-cities-world-9762767.html>

(2) The intervention endured from August, 2016 to March, 2018.

(3) In previous research, the "death places" were referred as "death territories".

(4) IPEA also uses the Mortality Information System (SIM) as its source. The database considers all Death Certificates registered in the municipalities.

(5) The database of IPEA can be accessed through the "Atlas of Violence" software, available at: <http://www.ipea.gov.br/atlasviolencia/>

(6) The research excluded from the sample the cases of young non-residents of Porto Alegre who died in the city.

(7) Statistical Package for Social Sciences.

(8) Open Source Geographic Information System.

(9) The "black" category is the junction of two other categories used by IBGE: black and brown.

(10) Sources: Cartography Coordination - SMAMS - Secretariat for Environment and Sustainability / Porto Alegre City Hall; IBGE.

(11) In the following analysis, we adopted the IBGE classification for race / color, in which we consider black individuals to be black or brown; and non-black individuals, white, indigenous or yellow.

(12) In Brazil, data regarding age, race and gender distribution of the population is produced at 10-year intervals by the Democratic Census of the Brazilian Institute of Geography and Statistics (IBGE). All surveys mentioned considered the IBGE data from the 2010 Census. Data on the 2020 Census has not yet been published.

(13) Geospatial data file format that can be used by the Geographic Information System – GIS.

(14) Material obtained from the Porto Alegre City Hall website. Accessed:

http://www2.portoalegre.rs.gov.br/spm/default.php?p_secao=297 November 2018.

(15) For this analysis, the variables "Place of death" (lococor) and "Neighborhood of Occurrence" (baiocor) were crossed in the SPSS. The variable "Place of death" has the following codes: 1-hospital; 2-other health facilities; 3-domicile; 4-public road; 5-others; 9-ignored.

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