

59 - HISTORICAL SERIES (2000-2008) OF DEATHS BY DROWNING IN THE STATE OF ALAGOAS-BRAZIL

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INTRODUCTION

The drowning is defined as a type of trauma where aspiration of unbody liquid, caused by the submersion or immersion (van DORP et. Al., 2002). In the aspect of forensic medicine the drowning is inserted in the context of violent death as a modality epitomized choking (Augustine, 2004).

According to the World Health Organization (2000) it is estimated that, in the world, each year, half a million people die by drowning, and 260.000 are children. In Brazil, data from the Ministry of Health (2002) indicate approximately 1.3 million cases of drowning, of these, nearly eight thousand causes death and approximately 65% are children between 5 and 14 years, and thus, in the second cause of death for reasons outside this age and third in the sum of all ages (ARAUJO, 2007). For Soares (2004), die more drowned, per year, in Brazil, that the sum of homicides in Norway, Greece, Ireland, Switzerland, Sweden, Slovenia, Singapore, Austria, Finland, Spain, Canada, Portugal, Republic of Armenia, Denmark, Estonia, Israel, Hungary and the Czech Republic. In this context, it is the knowledge of the rules in the country and the reduction in the number of though because in addition to being a public health issue involves psychosocial and economic aspects, Guaiano (2005) affirms that the physical education has an important role in prevention of drowning, by the capacity of professionals have to build a new culture of information on this type of fatality spreading in the population aware of preventive actions mainly in swimming lessons. Thus, this study investigated cases of drowning in the State of Alagoas in aspects of seasonality, gender and age group in the period 2000-2008.

MATERIAL AND METHODS

-Characterization of field of study

The State of Alagoas is situated in the northeast of Brazil, with 27.767.661 kilometre area consisting of 102 municipalities and a population estimated at 3.037.912 inhabitants, capital city of Maceió with approximately 922.000 inhabitants and a range of 230 km average annual temperature of 29 C; has also 19 ponds and three main rivers (San Francisco, Mundaú and Paraíba middle) (IBGE, 2007).

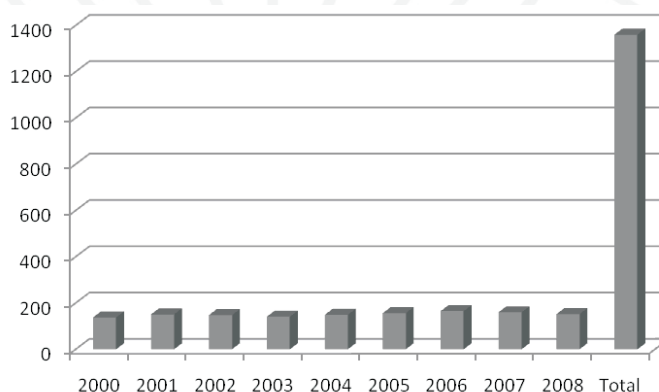
-Obtain data

The data were obtained from the records of occurrences drowning deaths registered in Legal medical Institute in the period 2000-2008. This study was approved by opinion 130609 of 22/06/09 issued by the University's Ethics Committee Tiradentes situated in the city of Sergipe state (Sergipe).

RESULTS AND DISCUSSION

In the period 2000-2008 were recorded 1.360 cases of deaths by drowning in Alagoas. When doing a review of the distribution of drowning deaths, there – if a regular occurrences between the years 2000-2008 in accordance with Figure 1.

Figure 1 – Prevalence of drowning cases per year in the period 2000-2008 in the State of Alagoas.



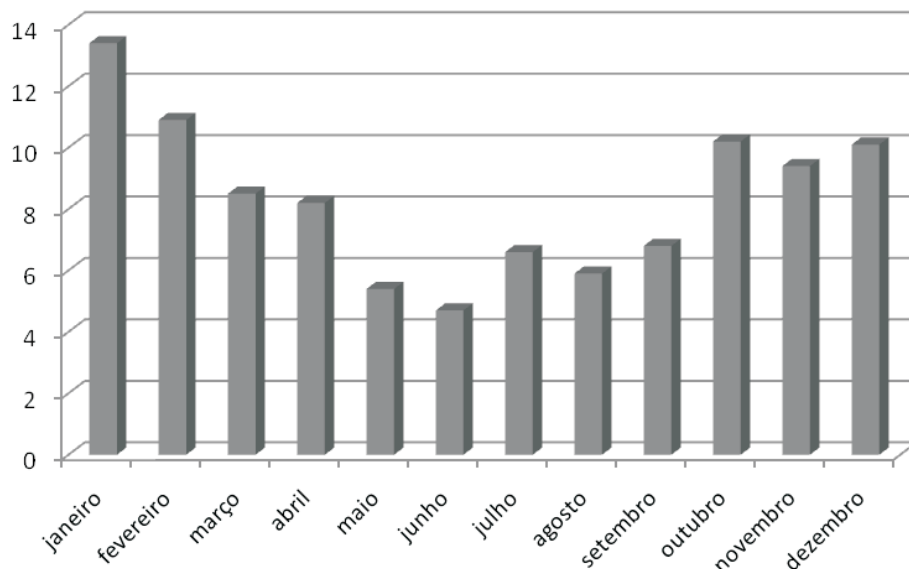
Source: IML/Alagoas

As for months, it was identified a greater prevalence of drowning deaths in the hottest of the year, which normally coincide with school holiday period and climate called summer station (Figure 2).

The months of December, January and February are around 34.4% (467) of cases of drowning in the period studied, and the month of January presents the greatest number of occurrences, 182, which correspond to 13.4% of occurrences, underscoring that the summer is the season at greatest risk for drowning deaths in the State of Alagoas.

The months of October, November and December also demonstrated a strong prevalence of drowning deaths, totaling 26.4% (359), indicating spring as the second season more prevalent in percentage of deaths. The station with the lowest prevalence of deaths 17.2% (235) is the winter that occurs in the months of June, July and August.

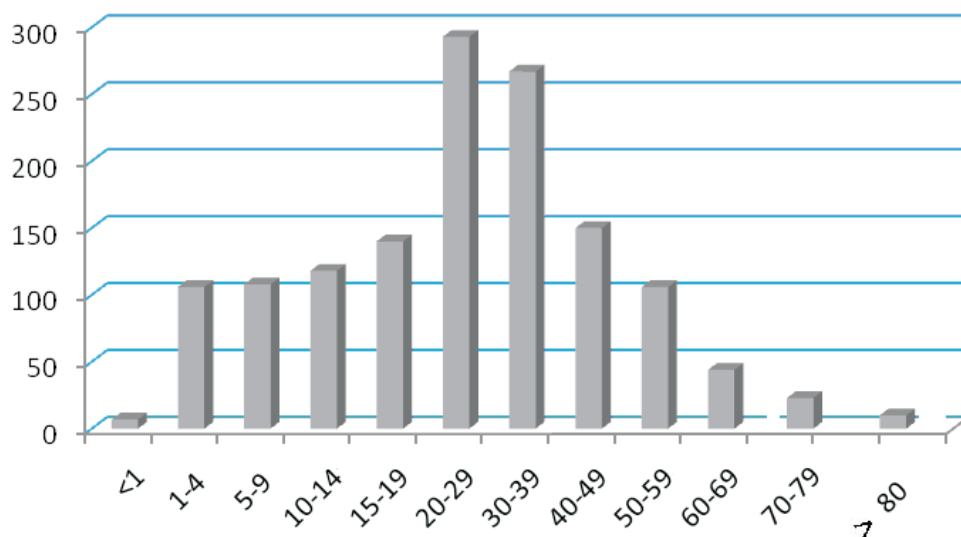
Figure 2 - Monthly percentage distribution of cases of drowning per month for the period 2000-2008 in the State of Alagoas/Brazil.



So

In relation to the age, it was noted that in the period 2000-2008 there is a higher prevalence of drowning deaths by age 20 to 29 years (293) followed by the age of 30 to 39 years (267); it was found also a high number of deaths by drowning in ages ranging from 1 to 14 years (322), in accordance with Figure 3.

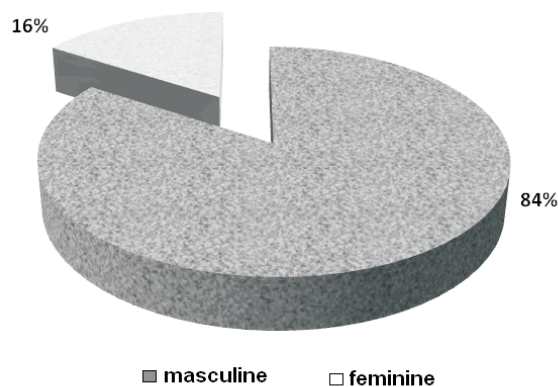
Figure 3 - Distribution of drowning cases by age group for the period 2000-2008 in the State of Alagoas.



Source: IML/Alagoas

Regarding the gender, it exists a strong prevalence of drowning deaths for men (1.145) in relation to women (215) as demonstrated in Figure 4.

Figure 4 - Distribution of drowning cases by gender for the period 2000-2008 in the State of Alagoas.



Source: IML/Alagoas

According with Espín (2006) in his study on drowning in the towns of Campinas and Ribeirão Preto, there was a greater number of deaths in the productive age as well as men's gender. Somariva (2006) has identified in his research on drowning deaths in Florianópolis, capital of the State of Santa Catarina, similar prevalence identified in Alagoas, mainly in respect of age and gender.

For Szpilman (2005), various are the factors that influence the cases of death by drowning in standard that happen, including the consumption of alcohol, the lack of primary care, especially with children in aquatic environments and the local security standards and sometimes justify occurrences in patterns that happen. Celis et al (2008) found that in Mexico City there is a marked prevalence of drowning deaths in men on feminine gender as well as the instances are larger more productive age of the population.

Analyzing data obtained in this survey, it was identified that drowning deaths are comparable with data from national and international surveys. Further investigations should be carried out to draw a more complete epidemiological profile on this modality of death in the State, contributing to the prevention initiatives taken by public policies for health promotion with more constant saves lives and learning swimming in schools and orientation of the public authorities, educators and health officials.

CONCLUSION

The results of this work identifies the number of deaths by drowning in Alagoas at the time of the study, which understood the years 2000-2008 was 1.360 deaths, being more frequent in genre men aged between 20 and 40 years in the period from November to March.

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HISTORICAL SERIES (2000-2008) OF DEATHS BY DROWNING IN THE STATE OF ALAGOAS-BRAZIL

ABSTRACT

The World Health Organization estimates that worldwide each year, half a million people die by drowning, with 260,000 of them children. In Brazil, data from the Ministry of Health indicate about 1.3 million cases of drowning, of those, almost eight thousand come to death and about 65% are children between 5 and 14 years, thus constituting the second cause of death from external causes in this age group and third in the sum of all ages. In this context, it is necessary to know the reality of death by drowning in the country, so this study aimed to investigate cases of drowning in the state of Alagoas on the issues of seasonality, gender and age group from 2000 to 2008. Data were obtained from the Forensic Institute of the State and showed that in the period were 1360 registered deaths by drowning, concentrated in spring and summer, affecting significant in males. The age group most affected is that of 20 to 40 years, and at ages 1 to 14 years are also concentrated the largest proportion of deaths by drowning. The results show that deaths by drowning in the state of Alagoas are comparable with data from national and international research, however further investigation should be performed to draw a more complete epidemiological profile of this mode of death, contributing to making prevention initiatives through policies aimed at promoting health.

KEY WORDS: drowning, death, Alagoas

HISTORY SERIES (2000-2008) DE DÉCÈS PAR NOYADE DANS L'ÉTAT D'ALAGOAS-BRÉSIL

SOMMAIRE

L'Organisation mondiale de la Santé estime que le monde chaque année, un demi-million de personnes meurent par noyade, avec 260.000 étaient des enfants. Au Brésil, les données du Ministère de la Santé indiquent environ 1,3 millions de cas

de noyade, de ce nombre, près de huit mille venir à la mort et environ 65% sont des enfants entre 5 et 14 ans, constituant ainsi la deuxième cause de décès à des causes externes de ce groupe d'âge et le troisième de la somme de tous les âges. Dans ce contexte, il est nécessaire de connaître la réalité de la mort par noyade dans le pays, donc cette étude visait à étudier les cas de noyade dans l'État d'Alagoas, sur les questions de saisonnalité, le sexe et groupe d'âge de 2000 à 2008. Les données ont été obtenues à partir de l'Institut médico-légal de l'Etat et a montré que dans la période ont enregistré 1360 décès par noyade, surtout au printemps et en été, affectant significative chez les mâles. La tranche d'âge la plus touchée est celle des 20 à 40 ans, et à l'âge de 1 à 14 ans sont également concentrées la plus grande proportion des décès par noyade. Les résultats montrent que les décès par noyade dans l'État d'Alagoas sont comparables avec les données de recherche nationaux et internationaux, toutefois une enquête plus approfondie devrait être effectuée pour établir un profil épidémiologique plus complète de ce mode de décès, contribuant à rendre les initiatives de prévention grâce à des politiques visant à promouvoir la santé.

MOTS CLÉS: noyade, mort, Alagoas

SERIES DE HISTORIA (2000-2008) DE LAS MUERTES POR AHOGAMIENTO EN EL ESTADO DE ALAGOAS-BRASIL

RESUMEN

La Organización Mundial de la Salud estima que en todo el mundo a cada año, medio millón de personas mueren por ahogamiento, siendo que 260.000 de ellos son niños. En Brasil, los datos del Ministerio de Salud indican alrededor de 1,3 millones de casos de ahogamiento, de estos, casi ocho mil terminan en muerte y aproximadamente el 65% son niños de entre 5 y 14 años, lo que constituye la segunda causa de muerte por causas externas en este grupo de edad y tercero en la suma de todas las edades. En este contexto, es necesario conocer la realidad de la muerte por ahogamiento en el país, por lo que este estudio tuvo como objetivo investigar los casos de ahogamiento en el estado de Alagoas abordando la estacionalidad, sexo y grupo de edad, entre 2000 y 2008. Los datos se obtuvieron del Instituto Médico Legal y demostraron que en el período se registraron 1360 muertes por ahogamiento, concentradas en la primavera y verano, afectando principalmente los hombres. El grupo de edad más afectado es el de 20 a 40 años, y en las edades de 1 a 14 años también se concentra la mayor proporción de muertes por ahogamiento. Los resultados muestran que las muertes por ahogamiento en el estado de Alagoas son comparables con los datos de investigaciones nacionales e internacionales, sin embargo, nuevas investigaciones se deben realizar para elaborar un perfil epidemiológico más completo de este modo de muerte, que podrá contribuir para iniciativas de prevención a través de políticas destinadas a promover la salud.

PALABRAS CLAVE: ahogamiento, muerte, Alagoas

SÉRIE HISTÓRICA (2000-2008) DOS ÓBITOS POR AFOGAMENTO NO ESTADO DE ALAGOAS-BRASIL

RESUMO

A Organização Mundial de Saúde estima que, no mundo a cada ano, meio milhão de pessoas morrem por afogamento, sendo que 260.000 são crianças. No Brasil, dados do Ministério da Saúde indicam cerca de 1,3 milhão de casos de afogamento, destes, quase oito mil chegam ao óbito e cerca de 65% são crianças entre 5 e 14 anos, constituindo-se assim, na segunda causa de morte por motivos externos nesta faixa etária e a terceira na soma de todas as idades. Nesse contexto, faz-se necessário o conhecimento da realidade dos óbitos por afogamentos no país, assim este estudo teve como objetivo estudar os casos de afogamento no estado de Alagoas quanto aos aspectos da sazonalidade, gênero e faixa etária no período de 2000 a 2008. Os dados foram obtidos do Instituto Médico Legal do Estado e mostraram que no período foram registrados 1.360 óbitos por afogamento, concentrados no período de primavera-verão, afetando de forma expressiva o gênero masculino. A faixa etária mais acometida é aquela de 20 a 40 anos, sendo que nas faixas etárias de 1 a 14 anos estão também concentradas as maiores proporções de óbitos por afogamento. Os resultados mostram que os óbitos por afogamento no estado de Alagoas são comparáveis com dados de pesquisas nacionais e internacionais, no entanto outras investigações devem ser realizadas para traçar um perfil epidemiológico mais completo sobre esta modalidade de morte, contribuindo para a tomada de iniciativas de prevenção, através de políticas públicas de promoção da saúde.

PALAVRAS CHAVES: afogamento, óbito, Alagoas.

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