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Management of infectious waste in the home of patients with diabetes mellitus

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Summary - The purpose of this work is to make known to the community the management that should have the biopeligrosos waste that are generated as they are the sharps that are generated at home product of the control of metabolic diseases como diabetes Mellitus (DM) to use needles, syringes, lancets, knives, gauze, etc. ., to avoid health risks and environmental pollution where education and citizen participation promote social commitment in conjunction with university students in such a way that develop in an integral way with critical and free thinking so that, in this way, they contribute to the handling of infectious and sharp material in an individual and community way to reduce the ambital contaminationthat isgenerated by the mismanagement of these materials and that the community learns the handling of sharp material generated in the home and that is a source of environmental pollution in the region. Taking into account that health personnel who are trained for such management, the WHO estimates that of 35 million health workers worldwide 3 million have experienced annual percutaneous exposure to blood pathogens of which 2 million were seen exposed to the hepatitis C virus, 0.9 million to the hepatitis C virus and 170,000 to HIV.

There are no studies that indicate how sharp materials are disposed of at home and the relationship of possible contagion through this waste generated at home but it is essential to reduce the associated risks as well as contamination by these materials by what is reported by the WHO in health personnel who are found trained tra. Reason why health areas should teach the management of the aforementioned waste to the community, through workshops and talks in the days of community linkage that are held in the region of Tehuacán

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Abstract

The purpose of this work is to make the community aware of the management that biohazard waste that is generated such as sharps generated in the home should have as a result of the control of metabolic diseases such as Diabetes Mellitus (DM)when using needles, syringes, lancets, knives, gauze, etc., to avoid health risks and environmental contamination in where education and citizen participation promote social commitment together with university students in such a way that they are developed in an integral way with critical and free thinking so that, in this way, they contribute to the handling of infectious and puncturing material in an individual and community way to reduce the environmental pollution that is generated by the poor management of these materials and the community that learns the handling of sharps material generated in the home and that is a source of environmental contamination in the region. Taking into account that health personnel is trained for such management WHO estimates that 35 millions of health workers worldwide 3 million have annually experienced percutaneous exposure to bloodborne pathogens of which 2 million were exposed to the hepatitis C virus, 0.9 million to the hepatitis C virus and 170,000 to HIV.1

There are no studies that indicate how sharps are disposed of in the home and the relationship of possible contagion through these sharp waste generated in cas but it is essential to reduce the associated risks as well as contamination by these instruments as reported by WHO in health personnel who are trained. Reason why the health areas should teach the management of the aforementioned wastes to the community, through workshops and talks in the days of community bonding that take place in the region of Tehuacàn

Keywords : DM, infection, puncture, handling, waste

I. INTRODUCCIÒN

Metabolic diseases are an important cause of morbidity and mortality in Mexico, but mainly Diabetes Mellitus (DM) represented in 2014 the leading cause of death in our country[1]. The prevalence of diabetes by previous medical diagnosis in adults nationwide was 7%, is higher in women (7.3%) than in men (6.5%) In the group of 50 to 59 years, this proportion reached 13.5%, 14.2% in women and 12.7% in men. In the 60-69 age group, the prevalence was 19.2%, 21.3% in women and 16.8% in men. [2] . Other diseases where you can use sharp waste are: Allergies, arthritis, cancer, infertility, kidney failure among many others.

Technology and product innovation to meet the needs of DM patients is increasing every day with a tendency to reduce the number of infectious biological hazardous waste by implementing insulin release pumps as required by patients, until the implementation of the aforementioned pumps, the participation of society is necessary to identify the sharp waste and biological waste that are generated day by day at home when using cotidine needles for the application of various pharmaceuticals for the control of metabolic disorders such as

: Diabetes Mellitus being that it is essential in insulin-dependent patients to use pens to inject insulin or syringes to apply said drug and lancets for the measurement of fasting glucose, in such a way that it is not the only condition that requires it, at the same time younger people are immersed in drug-dependence (Drug addiction) which leads them to usesyringes with needles where there is no adequate disposal control of such sharp-cutting material being often shared to inject such waste reach the trash without perform proper separation and where personnel working in garbage collection have a continuous risk of becoming infected with the most common hepatitis B virus, C and ICV, which are the most prevalent. Therefore, it is important to raise awareness in homes how important it is to properly manage this sharp waste as a way to prevent contagion and pollution to the environment.

II PROBLEM STATEMENT

The inadequate management of sharp and infectious waste can contaminate the pi,conjunctiva, wounds and cause various diseases if not handled properly since they represent a high risk for who come into contact with them. As described above, the management of sharp waste is a serious problem that affects the health of those who come into contact with them and contaminates the environment since most cases can be prevented and avoided. Educating the community and looking for special waste alternatives for the disposalprocess.

II. JUSTIFICATION

One of the reasons for carrying out this research is because of the high percentage of insulin-dependent patients, drug addiction, fertility problems, allergies, kidney failure and infectious diseases that exist in our country and the way in which the relatives of such patients they are seen in the need to learn and handle syringes, lancets, needles, scalpels etc. For the control and management of this type of patient and the challenge represented by the disposal of sharps and that do not make awareness of the risk that exists when depositing them in the garbage and lack of knowledge of handling can affect third parties such as garbage collectors or pickers and also pollute the environment.

OBJECTIVO

Establish the management of sharp waste in the home to avoid transmission of diseases and environmental pollution.

SPECIFIC OBJECTIVES

1.-Talks and workshops in the community during the days of linking the proper management of sharp waste 2.-

Establish the appropriate containers for the disposal of sharps.

III DEVELOPMENT

PUEBLA.

The State of Puebla is large, its 36,000 square kilometers enclose a large number of townsandcities that often go unnoticed in the national geography but contain many attractions. With respect to its population, Puebla is the fifth most populous Federative Entity, after the State of Mexico, Federal District, Veracruz and Jalisco. In 2010 it had a total of 5,705,519 inhabitants, of which 2,744,162 are men and 2,961,357 are women.

The District of Tehuacán is the largest in the State of Puebla, with more than 4,780 square kilometers of surface, in an extremely broken land that enjoys all climates. Tehuacán has a total population of 274,906 inhabitants registered by INEGI until 2010. The total population of tehuacán Municipality is 260,923 people, of which 123,113 are males and 137,810 females[3]. Dividing this population into 108,674 minors and 152,249 adults, of which 15,704 are over 60 years old.

The population is distributed in 722 localities, of which 691 are considered rural because they have 2,500 inhabitants, and the remaining 31 are urban. This region concentrates the second largest group of indigenous population in the State of Puebla, with 170,567 ethnic speakers, representing 26.46% of the regional population and 2.95% of the State. In the Southeast of the region and entering Oaxacan territory, the Tehuacán-Cuicatlán Biosphere Reserve is located as a unique ecosystem of its kind[4]. The University Regionalization of the Benemérita Universidad Autónoma de Puebla (BUAP) was born with the premise of deconcentrating education and integrating spaces

university students with social ones to generate environments of human development that, through education and citizen participation, promote the social commitment of university students, as well as integral development and critical and free thinking so that, in this way, they contribute to the dissemination of culture, coexistence in diversity, individual and community growth, equity and a greater balance between the sectors that make up the society, in a community that learns, society being the beginning and end of the University, one cannot think of a university without a clear and well-defined social commitment oriented above all to promote the human, socioeconomic and sustainable development of its environment, in which the university actor reorients himself in their educational action; where both educators and learners are linked to reality based on principles and values[5]. Taking into consideration the above, it is necessary that thestudents whenintegrating into the field activities and when going to give prevention talks, can give talks on the proper management of sharps that are generated in the home so that in this way they can can prevent and reduce environmental cotamination, by these infectious biological products at a certain time even the handling of sanitary pads of mestruación that go to the garbage without the proper handling. While it is true that the community does not know about bioseg urity standards, students know them perfectly and know the risks posed by the mismanagement of sharp waste to the health of those who are exposes and the pollution it represents to the environment as it represents a biological risk [6]

According to WHO, 85% of health care waste is non-hazardous waste and 15% is considered hazardous and infectious to the community, it is expected that the improper management of sharp waste in the home represents a risk of waste originating from the use of sharp waste or cures of infectious processes in the home and how much As increased waste can lead to toxins, furans and other toxic atmospheric contaminants harmful to humans. [7]

Inadequate waste management has negative consequences for humanity as reported in history where one of the worst health crises was the bubonic plague or black death that ended with approximately millions of people in Asia, Africa and Europe. This disease was transmitted by rodents that walked the streets that had unsaltable conditions and the final disposal of the waste was deficient because it only contributed to the proliferation of the disease. [8]

It is important to understand the term waste defining itself as "waste generated by the human being as a result of activities, these can be semi-solid or solid which must be discarded because they are considered useless". [9] The main wastes generated in the home are sharps and body fluids such as purulent material containing pathogenic agents that pose a risk to human health and the environment.

They are situations of risk presented by the relatives in the improper handling of the needles when re-capping and punctured, the change of needles, lack of gloves when performing a cure for which it is necessary to train the community in patient care and management of sharp or infectious waste.

Steps of handling sharp materials in the home: 1.- Identify that it is a sharp waste

2.- Occupy the syringe or perform the healing and keep the waste recipiende at hand.

3.- Finishing the application of the injection discard the needle

, lancet , scalpel in an airtight lock container , rigid plastic with lid, the hole that possesses such a container must be less than one hand to avoid introduction of this, resisting cuts, torsion and impacts, waterproof, easy to transport, surface preference of red color, do not exceed the capacity greater than 30 liters and not over passing 4/4 capacity. Empty bottles of disinfectants and chemicals can be used for this purpose or at a certain time canisters for sharp waste [9]. Those approved by the U.S. Food and Drug Administration (FDA) can be obtained at any pharmacy or medical supplies stores.

4.-Transport to an SSA establishment for total disposal or companies that are engaged in the collection of such waste.

In the South Regional Complex, the link is made with various actions in an institutional way through professional practices and social service with public and private sectors contributing to the consolidation of the professional training ofthe student and the attention tothe needs of the environment, with a sense of responsibility and commitment, which is why it represents an area of opportunity the training of the community by the student for the management of sharp waste in the region of Tehuacan this by virtue of the fact that they cover 274,906 inhabitants reported by INEGI and to which we can access little by little with this training.

IV CONCLUSIONS

The research carried out gives us an overview of the waste Sharp What herself Generate in the home y the importance of knowing this type of waste , how they should be Managed for diminish the risk of transmission of infectious diseasesontagioses that can be transmitted by these wastes, as well as the pollution that represents the environment to the generate tóxinas , furans y other pollutants Atmospheric Toxic Harmful for the mankind[10] , that is why it is essential that the student who attends the community health conferences conduct workshops proper handling of sharp and infectious material and the containers in the which herself Discarded , this research Open the gap for realhoy a studio in the community and know of What way desenchan the waste Sharp .

Recommendations

Community training in the management of sharp waste to prevent accidents and pollution

In order to take into account the economy in the home make known the containers that can be useful (resistant plastic bottles that present a hermetic seal) for the waste of sharps or in their case

buy the right ones being the red colo of dangerous and label them as dangerous

Containers approved by the U.S. Food and Drug Administration (FDA) can be obtained at any pharmacy or medical supplies stores.

It is recommended to educate family members not to recasting the needle to avoid accidents and dispose of in the container already established for this purpose and not to store for long periods, maximum 30 days and three quarters of the containers.

Campaigns to disseminate places of reception of sharp waste.

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