

144 - USERS PERCEPTION LEVEL ABOUT THE RISKS OF DOMESTIC PESTICIDE

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INTRODUCTION

With the advanced progress of the civilizations, Technologies and information today, the importance of exposed toxicology risk is extremely relevant, even more so for the development of chemical industries that adapt their products to the new needs from the population¹.

The class of pesticides substances that include pesticides, raticides, fungicides, herbicides and fumigants, that represent selective toxicity, and in most cases is commercialized associated, presents some level of toxicity to the human being, and have organochlorates, pyrethroid and organophosphate/carbamates in its composition².

For having a great quantity of chemical substances or biological products that are developed in a way to potencialize biocidal action, the agro toxics are developed to kill plagues. They represent sizeable risk to any living orgaqnism^{3, 4}.

Organochlorates are banned from U.S. since 1972, in Brazil they are still commercialized for the treatment of pediculosis, and are cheap and efficient². As general attributions of its clinic manifestation, this component has weak estrogenic effects that may anticipate labors for crossing the placental barrier, as androgynous cause mal-formation in the male reproductive tract, and its metabolic are found in people with Parkinson's.

However its toxicity depends on diluents, exposure time and dosage and exposure form⁵. Its clinical manifestation as to acute exposure are mainly involuntary muscular spasms, nausea and vomiting. As to chronic poisoning manifest through renal, hepatic lesions, heart arrhythmias and peripheral neuropathies⁶.

As to pyrethroid draw attention due to its efficiency, and advantage in agriculture bradening its use and toxicity, contaminating air, ground and water, covering from bacteria to men. Its clinical manifestations are wide, as cardiovascular manifestations, burning sensation, central nervous system hyper excitement, muscular fatigue, sweating, blurred vision among others⁷. Synthetic pyrethroid are the main responsible for sneezing, eye irritation, excitement and convulsions with acute exposure. They can trigger bronchial asthma, mucosal irritation, allergies and hyper sensibility with chronic exposure⁶.

It's relevant to point out that with the agricultural prohibition of some pesticides such as organochlorate, there was an increase in organophosphate poisonings, taking first place in toxicity, followed by organochlorates, fungicides and herbicides⁸.

Organophosphate and carbamates present similar clinical manifestations, as rapid exposure causes abdominal cramps, vomiting, weakness, muscular spasms and convulsions. Its prolonged use triggers genetic alterations, contact dermatitis, and retarded neurological effects⁶.

The domestic use of pesticides generates potential toxicological damage to adults and especially children, making this practice a public health issue, including environmentally⁹.

The commercialization of pesticides that have nice smells, as citronella oil, eucalyptol and limolens and even the odorless ones, make users expose themselves more frequently to the products and, even, stay in the area after the pesticide application. As pesticide resisting strains have emerged, it's made the consumer insist on their use, extending the poisoning risks¹⁰.

The focus of this research approaches users perception level about the risks of domestic pesticides, as well as its toxicity, frequency of use, and risks that they present to users who have no criteria. Nowadays most pesticides have a safety use margin, however they cannot be manipulated without adequate training and by ordinary people. There is necessity for greater user awareness and information for using pesticides.

MATERIALS AND METHODS

Its a quali-quantitative approach, transversal, Epidemologic-nature study.

The study was composed by domestic pesticide users, in direct collect in the retail business, in the cities of São Paulo and Itapevi (SP), in the year 2013, people aged over 18 years, who agreed on participating in the study. A form containing objective questions, that clear the issues brought forth to grasp the domestic pesticide users perception was developed to compose the study, were used as study variables.

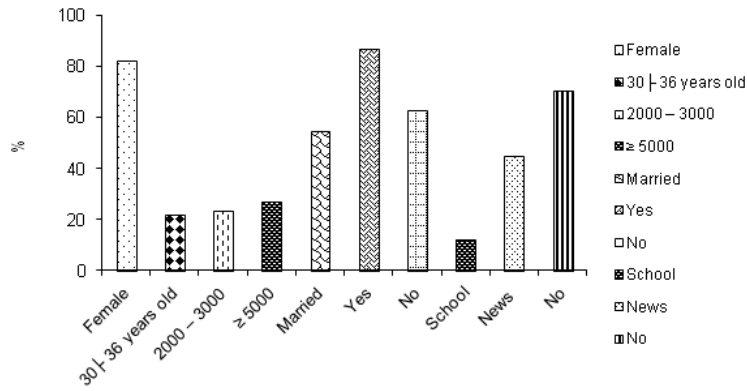
After filling the forms, compilation of data, mechanically, with graphic tabular exposure, expressed in numbers and percentages, based on the interpretation of the variables, as well as knowledge related to the theme. Ethic aspects were observed, the Free Clear Consent Term, based on the Resolution N196/96, from the National Health Board (MS), that establishes Ethics in Public Health, filled out and duly signed by the subjects of the research so that their consent was given to participating in the present study. Statistical treatment was done according to measurements of central tendency (parametric data) and Fischer Testing (non-parametrical data).

OBJECTIVES

To evaluate users knowledge about the risks in using domestic pesticides.

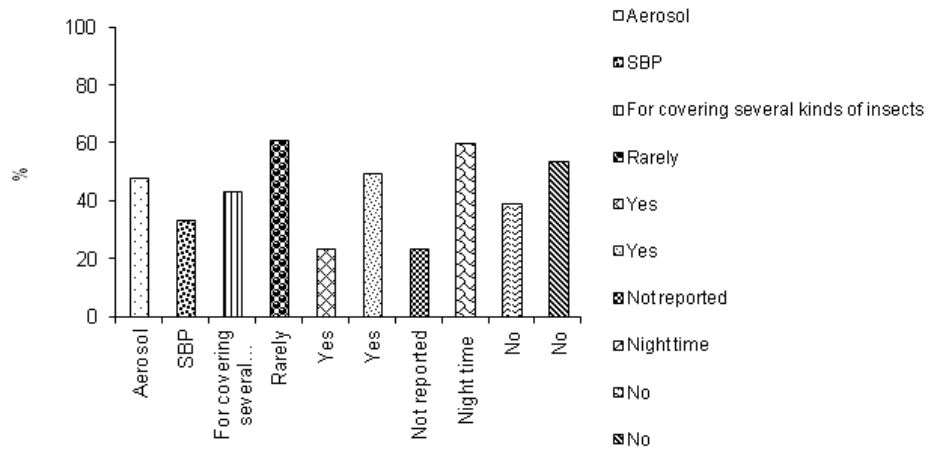
RESULTS

Graph 1 – Percentage distribution related to gender, age, individual income, family income, marital status, reading habits, subscription to a magazine, what magazine subscribes to, what TV shows one watches and about the use of household insecticides by the interviewees.



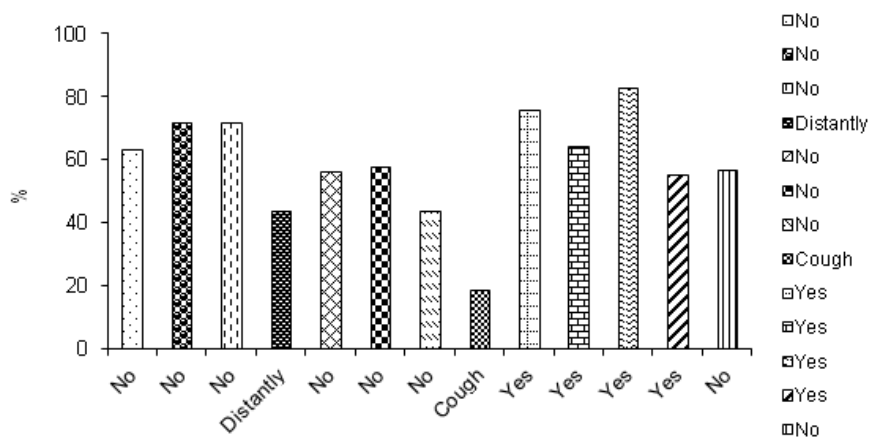
Most interviewees were female, aged between 30 and 36 years old, R\$2000-3000 individual income, family income greater than or equal to R\$5000. Most had reading habits, subscribed to Escola magazine, watch the news on TV and some use household insecticides.

Graph 2 – Percentage distribution related to kind of insecticide used, brand, reason for choice, frequency of use, whether it is believed the product acts only on insects, if it is known it is toxic, if the label of the product has ever been read, what time is common for use, if the windows are closed after applying the product and whether people remain in the area after application.



Most interviewees use aerosol insecticides, from SBP brand, and choose it for covering several kinds of insects, and rarely use it, and believe the product acts only on insects, there is knowledge of toxicity, most don't read the label of the product; the most frequent time for application is night time, windows are not closed after the application and people do not remain in the area after it.

Graph 3 – Distribution in percentages related to applying household insecticides, whether the application occurs with domestic animals in the area, if there's ever been an application with prepared food out, if there's ever been an application next to fruit, vegetables; what has a plug insecticide been used next to bed, whether has verified a safety application distance, if the level of toxicity is indicated on the label, if one knows toxicity information is mandatory by law, if there were any reactions to using the product; if the interviewee has observed insecticide advertisements, if the open windows in the advertisement suggest any warning, when the need for ventilation is mentioned, do they believe it's for being so toxic that can lead to death – would this statement be believed, would they change their opinion related to poison and stop using it due to the risks.



The data shows that interviewees do not apply the insecticide in the presence of domestic animals, with food already prepared or exposed or near fruits and / or vegetables. Those who said they had used plug household insecticides kept them away from bed. Most research subjects never checked the package for safe distance for product application, and an indication of some level of toxicity, and did not know that this information was required on packages. The most frequent reaction in users is cough (followed by the irritated throat). Interviewees observed the advertisements of household insecticides, and understand that the opened windows are a warning for ventilation, and when informed that this ventilation is necessary, for the toxicity of the product can lead to death, they believe in the statement. Most would change their opinion about the product, but would still use it.

CONCLUSION

The results obtained suggest that the subjects of the research, users of household insecticides do not read the label of the product and do not have knowledge regarding their application and use, but recognize its toxicity and the harmful effects of its use. However, when faced with the possibility of no longer using this type of product, showed resistance, by insisting on the use of the same.

THANKS

I would like to first thank God, the teacher Soraya, who always helped me a lot, not only as a guidance counselor, but as a friend. The World's Best Mother Flozina Lopes Lages ever taken pains to give me what no one can take away: knowledge. The Juliana Nering cooperating much.

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USERS PERCEPTION LEVEL ABOUT THE RISKS OF DOMESTIC PESTICIDE.

ABSTRACT

Today with the advance of civilization, and the growing need for comfort and convenience, individuals are increasingly using household insecticides to control insects, which have toxic risk for humans. This study aims to determine the level of users' perception regarding the risk of using such substances. This is a descriptive, cross-sectional, quantitative study, in which 123 individuals agreed to participate by answering a questionnaire, which was used as a variable. The data, once compiled, are presented in tables and simple frequency graphs expressed in numbers and percentages. The ethical aspects were respected, in accordance with Resolution No. 196/96 (CNS - MS). The results show that 29.27% of the study subjects use household insecticide which is chosen by 43.09% for achieving various types of insects; 62.60% of interviewees believe that the product acts only on insects; 52.03% have never read the product label, but 49.59% reported having knowledge of the toxicity of the poison and when faced with the possibility of not using it 56.91% of subjects refused. In conclusion results suggest that the research subjects are aware of the risk of the use of household insecticides, recognize their toxicity, but believe that the benefit outweighs the risks they submit themselves to by using the product.

KEY-WORDS: Household insecticides; insect control; toxicology, Public health

DEGRÉ DE PERCEPTION DES UTILISATEURS EN CE QUI CONCERNE LE RISQUE DE L'UTILISATION DES INSECTICIDES MÉNAGERS.

RÉSUMÉ

Aujourd'hui, avec le progrès des civilisations, et la nécessité de plus en plus pour plus de confort et de commodité, les individus utilisent de plus en plus les ménages les insecticides pour lutter contre les insectes, qui présentent degré de toxicité et les risques pour l'être humain. La présente étude vise à vérifier le degré de perception des utilisateurs concernant les risques de l'utilisation de ces substances. Il s'agit d'un descriptif, transversales, quantitative, dans lequel 123 personnes ont accepté de participer à la recherche, en réponse à un questionnaire qui a été utilisé comme une variable. Les données, une fois compilé, ont été présentés dans des tableaux et des graphiques de simple fréquence exprimée en chiffres et en pourcentages. Les aspects éthiques sont respectés, conformément à la Résolution n° 196/96 (CNS-MS). Les résultats montrent que dans 29,27 % des sujets de l'étude des ménages utilisant insecticide qui est choisi par 43,09 % par l'atteinte de divers types d'insectes; 62,60 % des personnes interrogées estiment que le produit fonctionne uniquement dans les insectes, et 52,03 % ne jamais lire l'étiquette du produit, toutefois 49,59 % ont dit qu'ils possèdent les connaissances de la toxicité du venin et lorsqu'ils sont confrontés la possibilité de ne pas l'utiliser 56,91 % des individus a refusé. Il est conclu que les résultats obtenus suggèrent que les sujets de la recherche sont conscients du risque de l'utilisation des insecticides ménagers, de reconnaître sa toxicité, mais je pense que les avantages du produit emporte sur les risques présentés.

MOTS-CLÉS: Insecticides ménagers; Contrôle des insectes; Toxicologie; Santé publique

GRADO DE PERCEPCIÓN DE LOS USUARIOS RESPECTO A LOS RIESGOS DE LA UTILIZACIÓN DE LOS INSECTICIDAS DOMÉSTICOS.**RESUMEN**

Hoy en día con el avance de las civilizaciones, y la necesidad cada vez mayor de confort y comodidad, las personas utilizan cada vez más los insecticidas domésticos para el control de insectos, que presentan cierto grado de toxicidad y riesgo para el ser humano. El presente estudio tiene por objetivo verificar el grado de percepción de los usuarios respecto a los riesgos de la utilización de esas sustancias. Este es un estudio descriptivo, transversal, cuantitativa, en la que 123 personas aceptaron participar en la investigación, en respuesta a un cuestionario, el cual fue utilizado como una variable. Los datos, una vez compilado, se presentaron en tablas y gráficos de frecuencia simple expresada en números y porcentajes. Los aspectos éticos son respetados, de conformidad con la Resolución n° 196/96 (CNS-MS). Los resultados muestran que en 29,27 % de los sujetos del estudio con insecticida hogar que se ha elegido por 43,09 % de logro de varios tipos de insectos; 62,60 % de los encuestados considera que el producto funciona sólo en los insectos, y 52,03 % nunca leer la etiqueta del producto, sin embargo 49,59 % dijo que cuentan con el conocimiento de la toxicidad del veneno y cuando se enfrenta la posibilidad de no utilizar el % de 56,91 % se negaron. Se concluye que los resultados obtenidos sugieren que los sujetos de la investigación son conscientes de los riesgos que supone el uso de insecticidas domésticos, reconocen su toxicidad, pero creo que los beneficios del producto superan a los riesgos.

PALABRAS-CLAVE: Insecticidas domésticos; Control de insectos; Toxicología; Salud pública

GRAU DE PERCEPÇÃO DOS USUÁRIOS QUANTO AO RISCO DO USO DE INSETICIDAS DOMÉSTICO.**RESUMO**

Hoje com o avanço das civilizações, e a necessidade cada vez maior de conforto e comodidade, os indivíduos utilizam cada vez mais inseticidas domésticos para controle de insetos, que apresentam grau de toxicidade e risco para o ser humano. O presente estudo tem como objetivo verificar o grau de percepção dos usuários quanto ao risco do uso de tais substâncias. Trata-se de um estudo descritivo, transversal, quantitativo, em que 123 indivíduos concordaram em participar da pesquisa, respondendo a um questionário, que foi utilizado como variável. Os dados, depois de compilados, foram apresentados em tabelas e gráficos de frequência simples expressos em números e percentagens. Os aspectos éticos foram respeitados, de acordo com a Resolução N° 196/96 (CNS-MS). Os resultados mostram que 29,27% dos sujeitos de pesquisa utilizam inseticida doméstico que é escolhido por 43,09% por atingir diversos tipos de insetos. E 62,60% dos entrevistados acreditam que o produto atua somente em insetos, e 52,03% nunca leram o rótulo do produto, porém 49,59% afirmaram possuir o conhecimento da toxicidade do veneno e quando confrontados a possibilidade de não utilizá-lo 56,91% dos indivíduos recusaram. Conclui-se que os resultados obtidos sugerem que os sujeitos de pesquisa estão cientes do risco do uso de inseticida doméstico, reconhecem a sua toxicidade, porém acreditam que o benefício do produto supera os riscos submetidos.

PALAVRAS CHAVES: Insecticidas domésticos, controle de insetos, toxicologia, saúde pública.