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Prevalence Of Corticosteroids In Primary Care In The City Of Peja

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Abstract

Introduction - The prevalence of corticosteroid use in primary care is an important topic in contemporary medicine due to their wide impact in the treatment of many health conditions. In many cases, corticosteroids are used to treat inflammation, autoimmune diseases, allergies and acute pollution, providing an effective solution for many patients.
Purpose - The purpose of this study is to examine the prevalence of the use of corticosteroids in the treatment of diseases in the pediatric ward at the KKMF in Peja. This analysis will help improve pediatric care and identify ways to optimize the use and management of corticosteroids in this patient group in this city.
Methodology - The methodology of this study involved a mix of different methods to collect and analyze data objectively and effectively. Initially, we will select a representative sample of 220 children from pediatrics at the Peja HCMC. After that, we will collect detailed data for each patient, including information on diagnoses, reasons for using corticosteroids, doses used and treatment of side effects. The data will be analyzed to assess the current practice of using these medicines in pediatric care and to identify ways to improve their management and use in Peja hospital, providing recommendations for a more consistent and efficient treatment for pediatric patients. .
Results - The results showing an effective and consistent use of corticosteroids in pediatric care at the Peja Medical Center are an important indicator of the quality of medical practice in this health institution.
Conclusions - We identified that Dexasone and Urbazone as the most used drugs in the treatment of pediatric diseases in the KKMF. This result suggests a physician preference for these two types of corticosteroids because of their efficacy and safety in the treatment of a wide range of pediatric diseases.

Keywords – Prevalence, Corticosteroids, Primary Care

I. INTRODUCTION

However, their use can be associated with various risks and side effects, especially when used for a long time or in high doses. Therefore, it is important that the use of corticosteroids in primary care is done in accordance with clinical guidelines and under the supervision of a qualified physician, paying special attention to the prophylaxis of potential side effects and regular monitoring of patients. Corticosteroids are synthetic drugs used to reduce inflammation in the body. Their action is based on imitating the hormones produced naturally by the body's adrenal glands.

Because of their anti-inflammatory power, corticosteroids are among the most important drugs, but questions are often raised about their effectiveness. When used in appropriate doses, they help reduce inflammation and regulate the immune system when the body attacks itself. In addition, they are often used as replacement therapy in diseases when the body does not produce the necessary hormones.

Corticosteroids are often used to treat allergies, skin inflammations, musculoskeletal diseases, autoimmune diseases, and some types of cancer. The advantages of this form of therapy include the wide range of actions and the quick effect.

Often, these drugs are used when the cause of inflammation is unknown. Side effects can occur, especially in long-term use, including increased appetite, weight gain, increased risk of infections, mood changes, depression, risk of diseases such as diabetes or worsening hypertension, osteoporosis, cataracts and glaucoma.

Because of their potential for serious side effects, use of these medications must be judicious. However, for severe causes of inflammation without clear causes, allergies, or autoimmune diseases, corticosteroids have an important role.

Their use in special groups of patients, such as the elderly, children, pregnant women, and those with other diseases, should be considered due to the possibility of interactions with other drugs. Corticosteroids are a group of drugs that are part of the family of steroid hormones, which are produced naturally by the peritoneal cavity in the human body. These hormones have a wide range of actions in the body, including the regulation of inflammatory, immune and metabolic processes.

Corticosteroids have long been used in medicine to treat many different conditions, including:

Inflammation: Used to reduce inflammation in diseases such as rheumatoid arthritis, asthma, and skin inflammations such as dermatitis.

Autoimmune diseases: Used to inhibit autoimmune reactions in diseases such as lupus and other autoimmune disorders.

Allergies: Used to treat serious allergic reactions and allergic asthma.

Cortisol deficiency: Used to treat a lack of cortisol in the body, such as in cases of insufficiency of the stomach lining.

Pollution control: Used to reduce inflammation after surgery, trauma, or in case of other acute pollution.

However, their use can be associated with side effects, especially in cases where they are used for a long time or in high doses. Some of these side effects may include increased risk of infections, mood changes, increased risk of osteoporosis, increased blood pressure, worsening of any heart disease, etc. It is important to use with caution and under the supervision of a qualified physician.

II. LITERATURE REVIEW

Corticosteroids are drugs similar to cortisol, a naturally occurring hormone produced by the body's adrenal glands. Cortisol plays a key role in many biological processes, including metabolism, immune response, and stress management (Dvorin 2020). Doctors often use corticosteroids to treat conditions such as asthma, hives or lupus, as they reduce swelling and irritation. Corticosteroids can provide significant help in reducing symptoms, but their long-term use is associated with the risk of serious side effects (Lucas 2008). Corticosteroids are used to treat everything from seasonal allergies to life-threatening organ inflammations.

This systematic literature review summarizes corticosteroid-related AEs based on the most recent publications and highlights key data gaps for additional research. Research since the 1980s has trended toward the use of low-dose corticosteroids, with the assumption that such dosing is generally well tolerated (Barrett 2018). However, the evidence from the current review reveals a significant clinical and economic burden. It is unclear whether high-dose corticosteroids are still being used in a significant proportion of patients, or whether the use of low-dose corticosteroids is the reason behind the contemporary evidence of burden. This key data gap requires further research. The current review summarizes the types and rates of corticosteroid-related AEs in light of current treatment practices. The dose-response relationship, however, was not well defined, indicating another key data gap (Ekins-Daukes 2022). The dose-duration relationship with corticosteroid-related AEs is important to determine, particularly by disease state, so that clinicians and patients can weigh the risks and benefits when making decisions about treatment regimens.

Increased use of health care resources has been shown to be associated with long-term use of high-dose corticosteroids.

However, this review found that there is very little recent, rigorous, original research available on the economic burden of long-term corticosteroid exposure. There are only a few economic assessments that have aimed to translate exposure levels into economic terms, such as resource use and overall costs. These estimates, although limited in number, have revealed a clear trend that higher levels of corticosteroid exposure are associated with higher use and cost of health care resources. (Chambers 1999)

This relationship is quite complex to study, as higher costs are likely to be accounted for both for the treatment of corticosteroid-related AEs and for other therapies required due to the greater severity great disease.

Also missing from the current literature is the economic burden of corticosteroid use in patients with autoimmune conditions who rely on corticosteroids as a key therapeutic option. The current review identified only one study focused on quantifying the economic burden of long-term corticosteroid use in an autoimmune disease population. Specifically, author Shah reports that among patients with systemic lupus erythematosus, the incremental cost difference between corticosteroid users with and without corticosteroid use-related AEs was $4607 per year. With disease-specific economic burden information, clinicians and researchers can develop different strategies to minimize adverse outcomes and maximize the therapeutic value of available treatments (O'Byrne 1996).

The reviewed articles were reported as is, without adjustments for potential quality differences. Notably, most of the included studies were retrospective studies, in which causality between corticosteroid use and clinical or economic outcomes is suggestive rather than definitive (Navanandan 2022).

Furthermore, many of these studies used administrative claims databases, which do not contain all relevant clinical information and are subject to potential coding errors. Another limitation was that many included studies could not adequately control for disease severity. In terms of estimating the economic burden of corticosteroid use, many studies reported only direct health care costs and did not assess other societal costs, such as job loss. Finally, differences in reported outcomes, patient populations, and corticosteroid dose and duration of exposure made precise comparisons across the included studies difficult.

III. MATERIAL AND METHODS:

3.1 The purpose and methodology of the work

By analyzing the distribution and use of these drugs in children, we aim to provide a deeper understanding of the practice of corticosteroid use in this age group, including reasons for use, frequency of use, dosage, and treatment of side effects. The methodology of this study will include a mix of different methods to collect and analyze data effectively and objectively. These are the steps that will be followed:

Selection of the samples: At the beginning, we must emphasize that during the period January - June 2023 in the pediatric department of the KKMF in Peja there were a total of 20362 children, but we will select a representative sample of 220 children who receive corticosteroids such as: dexason and urbazon. These samples will include children in the age group 1 – 19 years and different diagnoses to ensure a broad representation of the patient population.

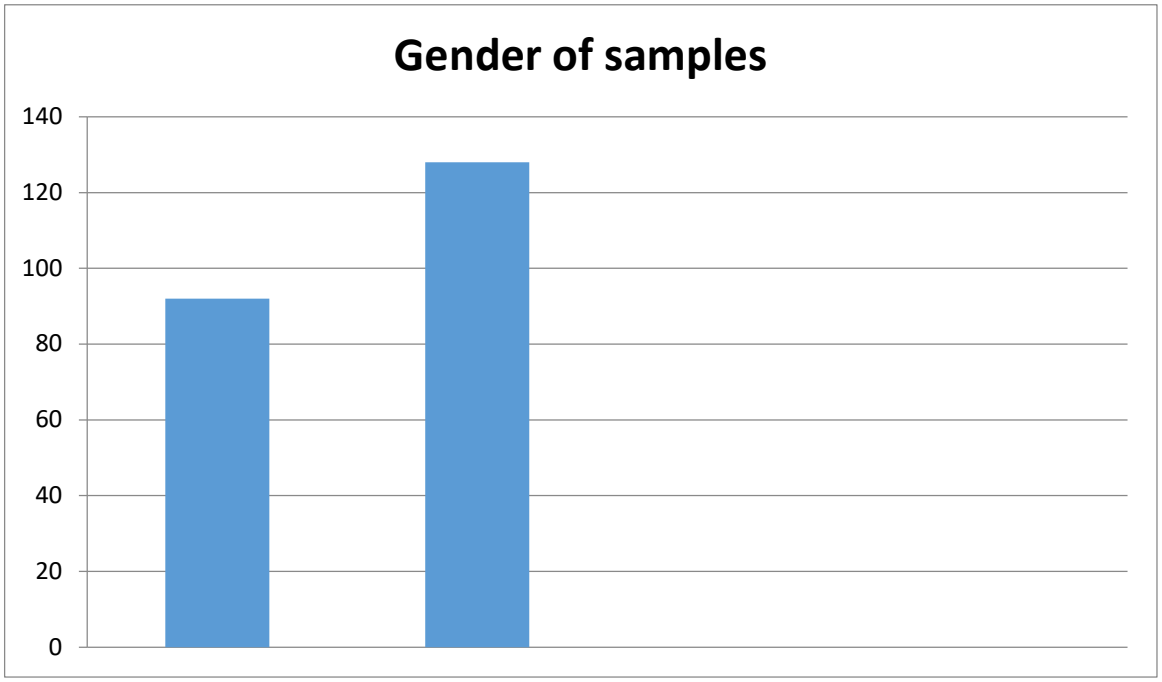
Data collection: We will collect detailed data on each patient, including age, diagnosis, reasons for corticosteroid use, dose used and treatment of any side effects. These data will be collected from medical records and from interviews with the parents or guardians of the children.

Data analysis: After data collection, we will analyze the distribution of corticosteroid use, identifying the most common diagnoses for which this therapy was used and the most used doses. We will also assess the incidence of side effects and their management.

Interpretation of the results: Based on the collected data and their analysis, we will evaluate the current practice of the use of corticosteroids in pediatric care at the KKMF. We will identify ways to improve this practice by providing recommendations for a more consistent and efficient use of these drugs in the treatment of pediatric diseases.

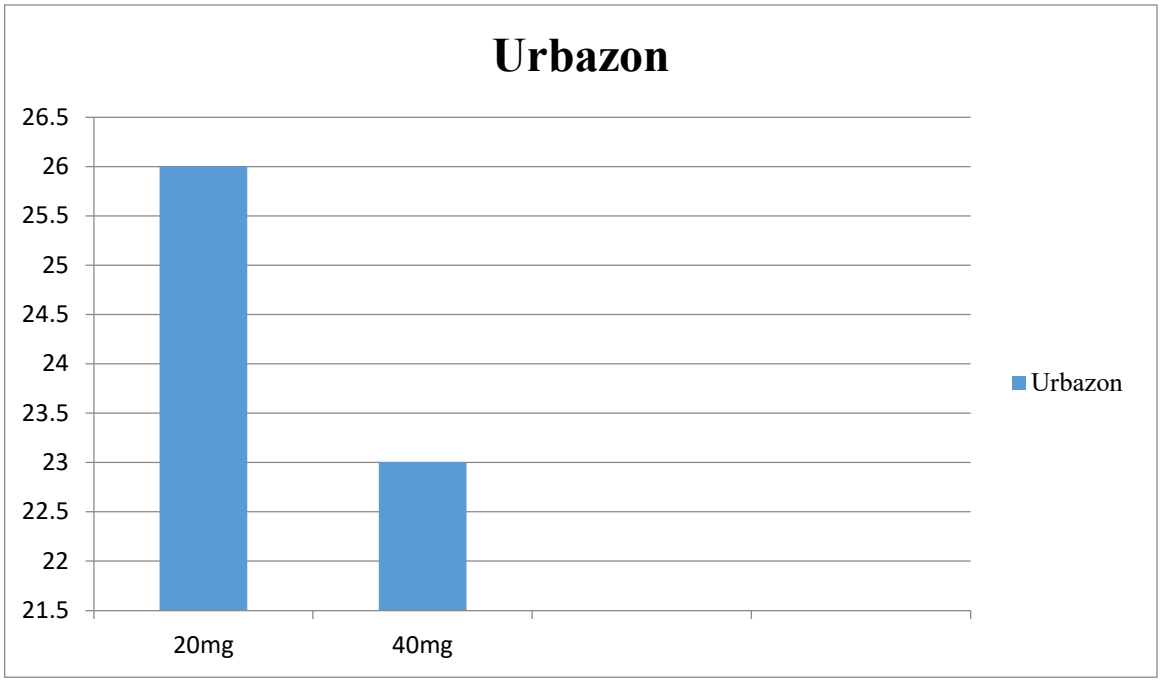
IV. RESULTS AND THEIR INTERPRETATION

Chart 1 Gender of samples



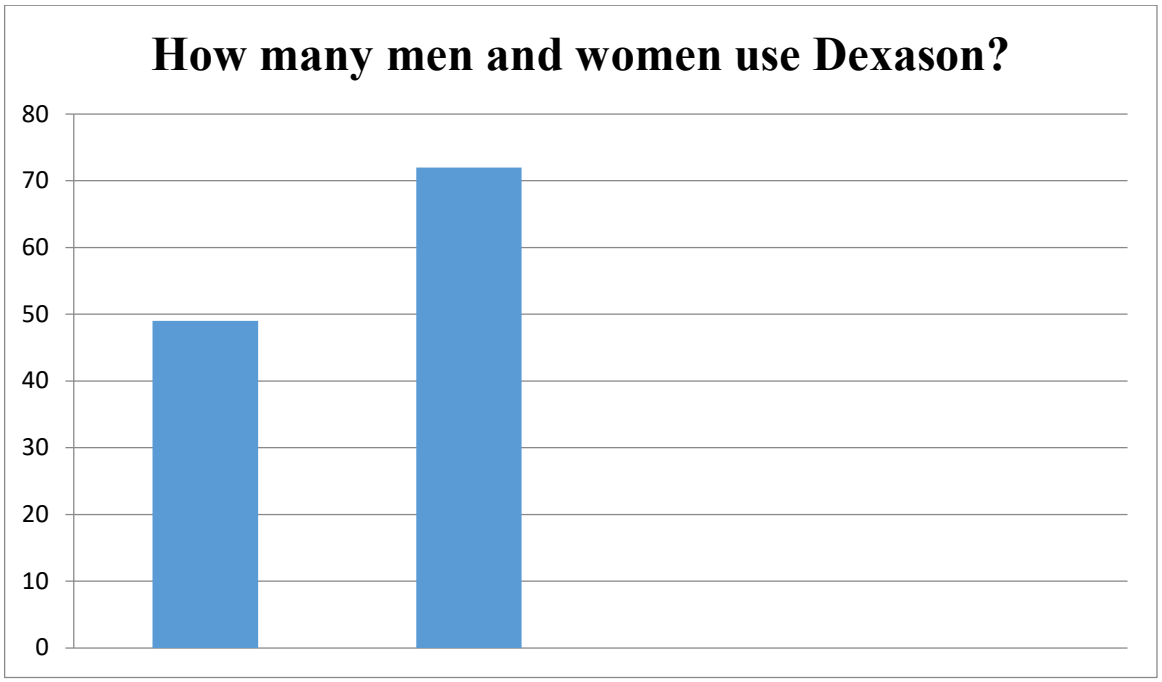
Out of a total of 220 samples, we have 92 females and 128 males.

Chart 2 Use of Urbazon types



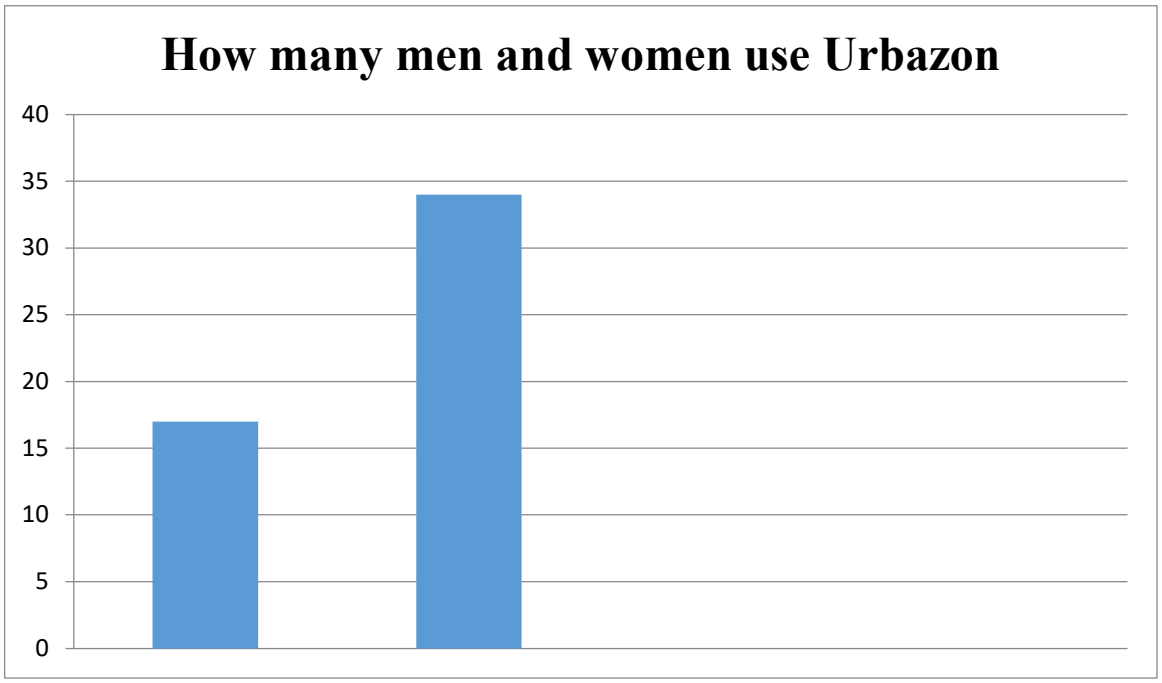
Based on the result above, we see that in pediatrics, those who were given a dose of urbazon 20mg are 26, and with a dose of 40mg there are 23 patients.

Chart 3 How many men and women use Dexason?



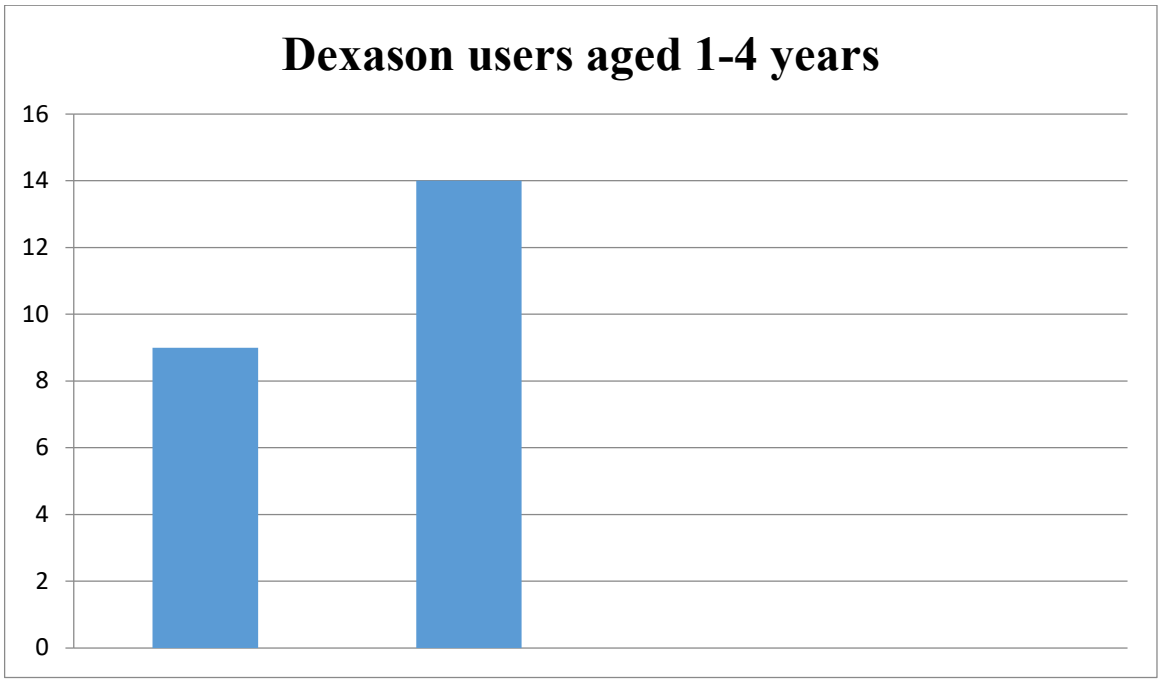
The results show that 72 men and 49 women used dexason.

Graph 4 How many men and women use Urbazon



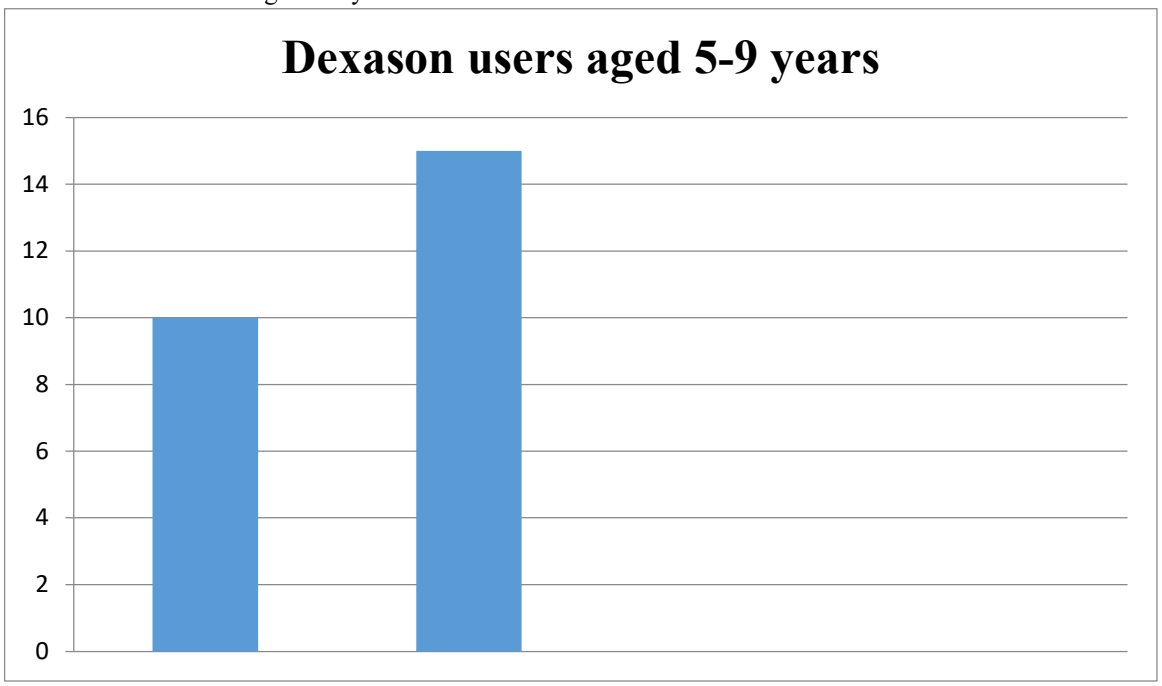
The results show that urbazon is used by 17 women and 34 men.

Chart 5 Dexason users aged 1-4 years



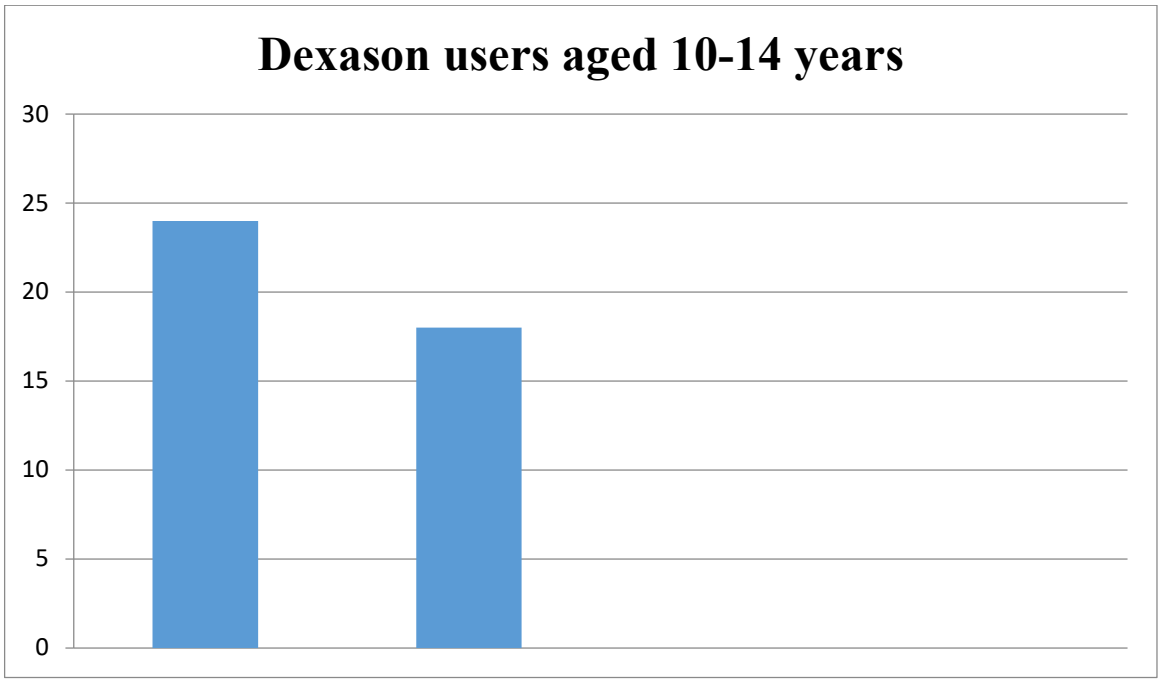
Dexason users aged 1-4 years were 9 females and 14 males.

Chart 6 Dexason users aged 5-9 years



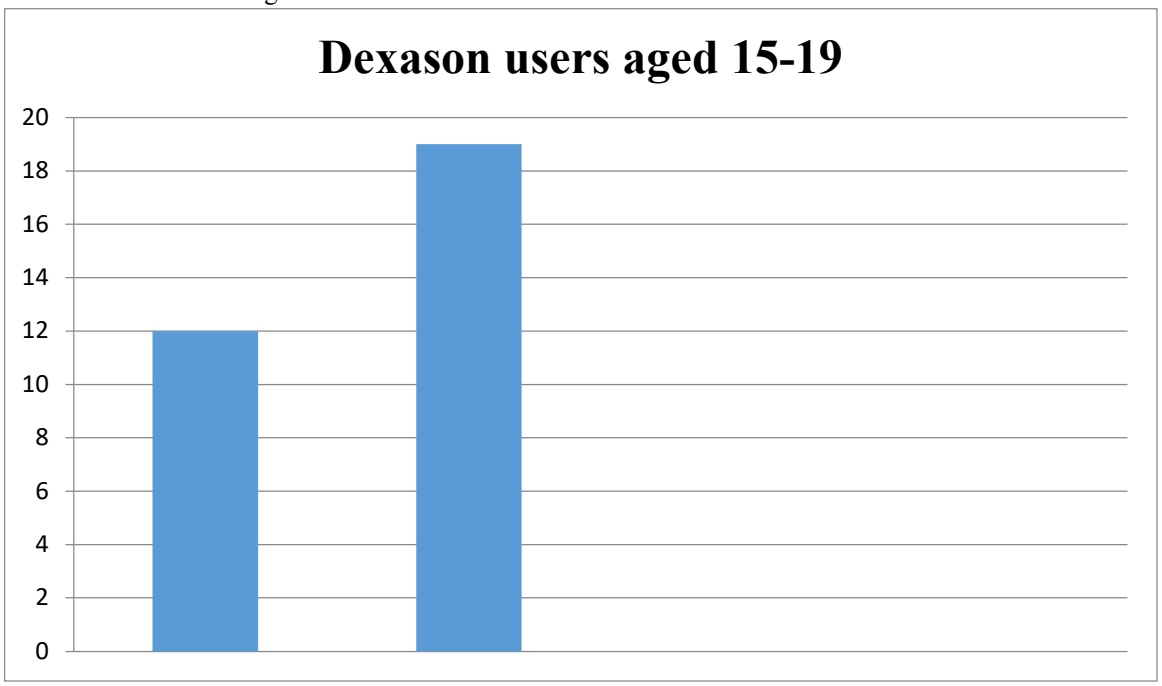
Dexason users aged 5-9 were 10 females and 15 males.

Chart 7 Dexason users aged 10-14



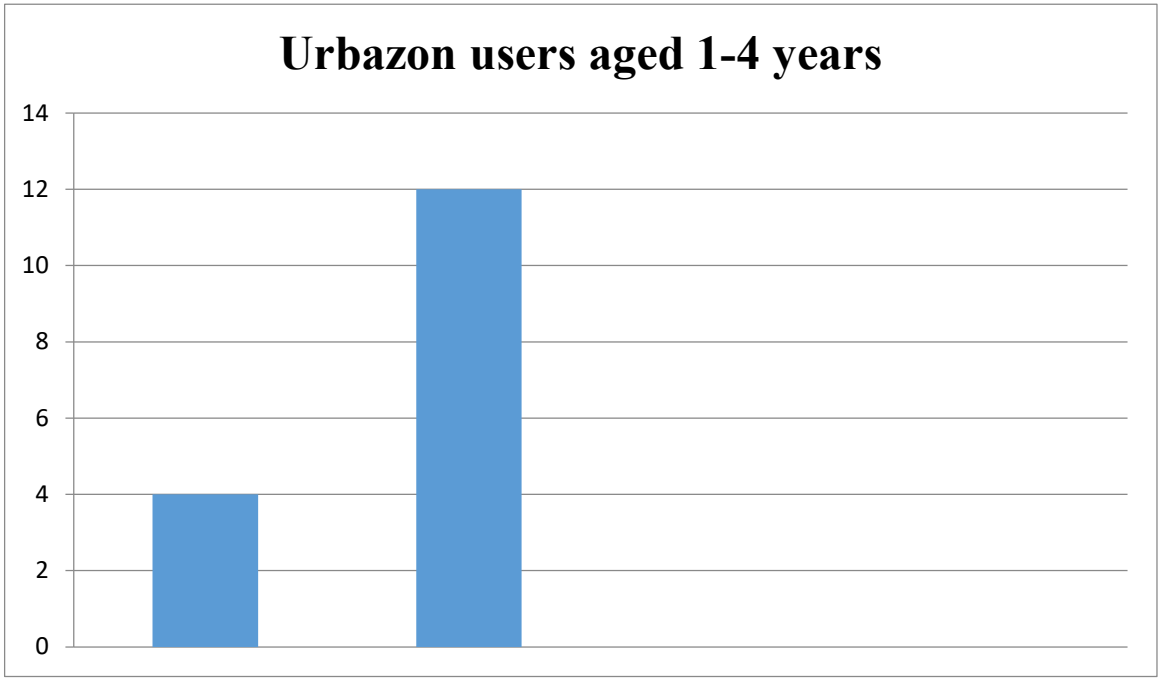
Dexason users aged 10-14 were 18 females and 24 males.

Chart 8 Dexason users aged 15-19



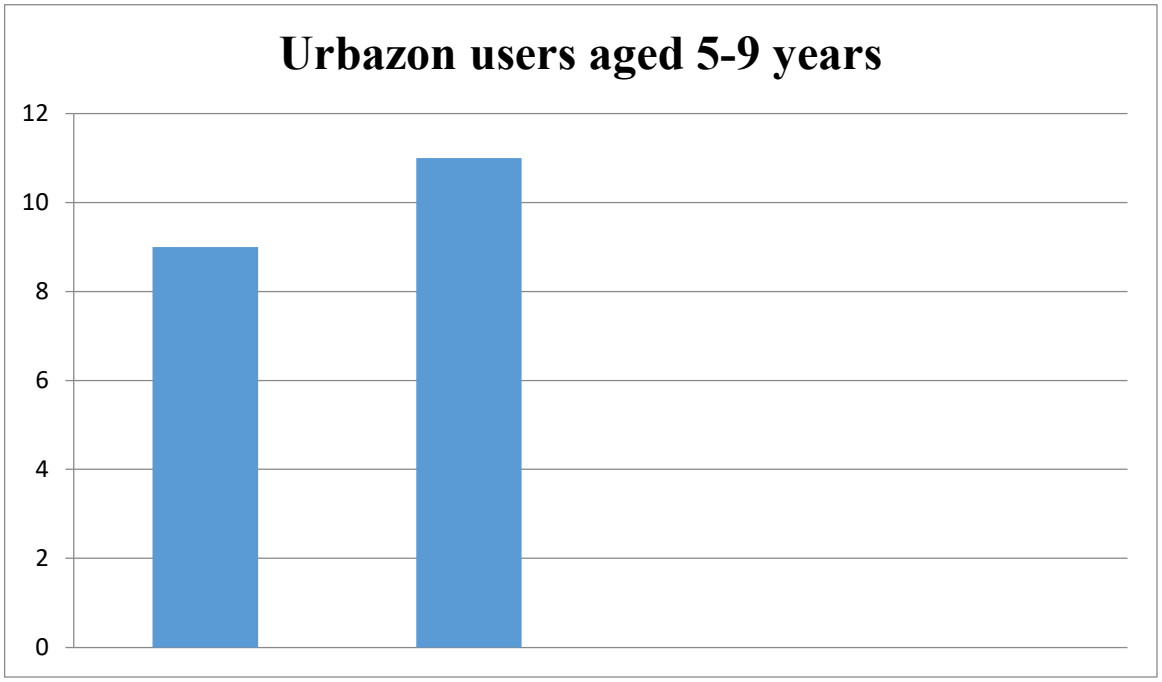
Dexason users aged 15-19 were 12 females and 19 males.

Chart 9 Urbazon users aged 1-4 years



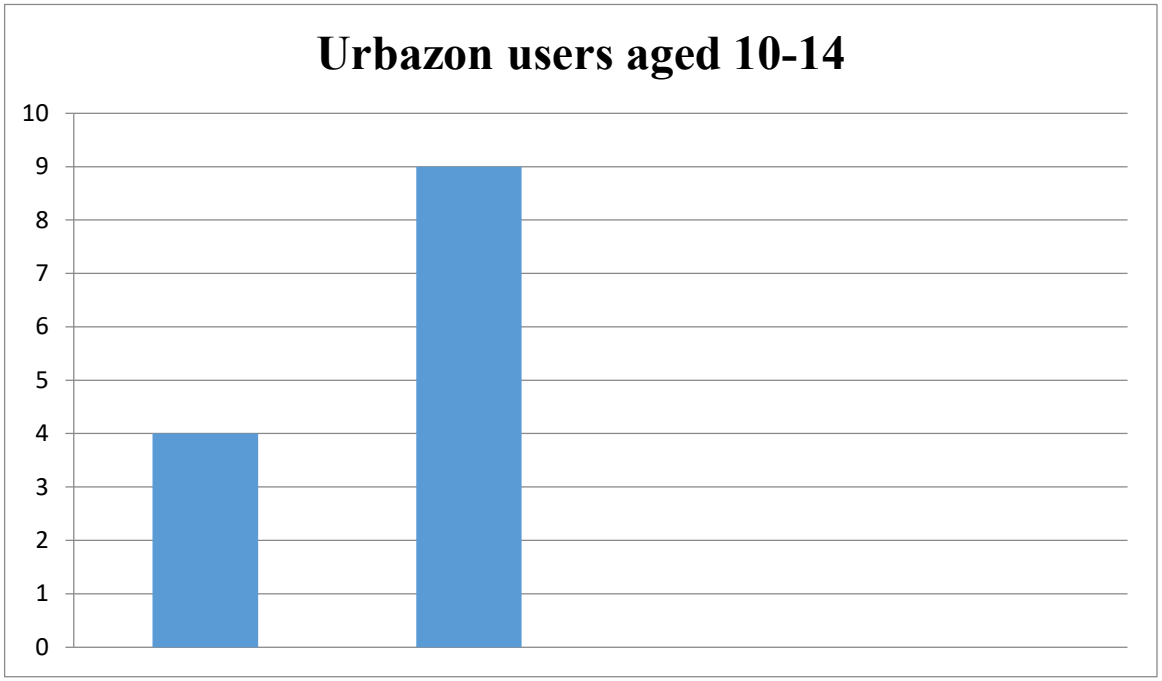
Urbazon users aged 1-4 years were 4 females and 12 males.

Chart 10 Urbazon users aged 5-9 years



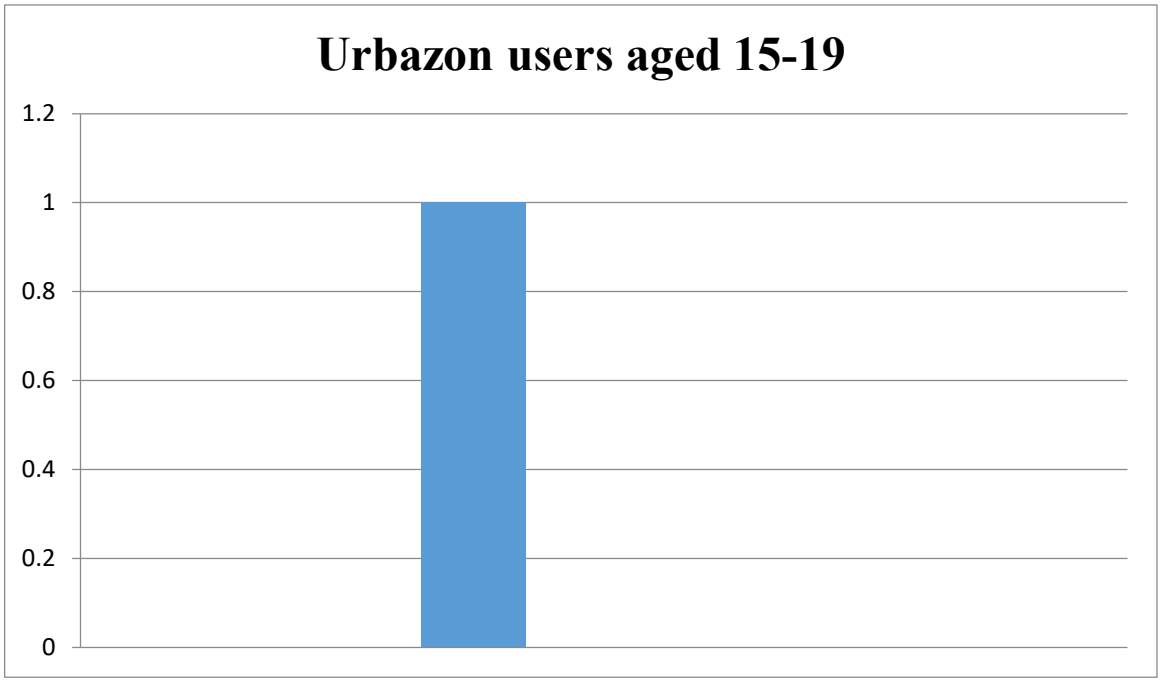
Urbazon users aged 5-9 were 9 females and 11 males.

Chart 11 Urbazon users aged 10-14



Urbazon users aged 10-14 were 4 females and 9 males.

Chart 12 Urbazon users aged 15-19



Urbazon users aged 15-19 were 0 females and 1 male.

V. CONCLUSIONS

Corticosteroids are drugs used to treat a wide range of conditions, including inflammation, allergies, autoimmune diseases, and many others. They can be applied in a variety of ways, including creams, ointments, eye drops, ear drops, and inhalers. In addition to local use, they can also be given in systemic forms, using tablets, syringes, or injections. However, the use of corticosteroids is associated with various side effects, including increased risk of infections, changes in blood sugar levels, high blood pressure,

glaucoma, skin changes, and many others. It is important that patients inform their doctor about their health conditions, medical history, and about any possible interactions with other drugs. Also, patients should be careful with their diet and exercise lifestyle, avoiding smoking and alcohol that can cause harmful drug interactions. In general, patient cooperation with the physician and regular monitoring are essential to manage side effects and ensure that corticosteroid treatment is as effective and safe as possible.

The use of corticosteroids such as Dexasone and Urbazone in pediatrics is important for the treatment of several health conditions in children. These drugs have the potential to provide relief from inflammation and symptoms of various diseases, such as asthma, allergies, rheumatoid arthritis and other autoimmune diseases. The dosage should be adjusted for the age and weight of the child, as well as for the health condition for which it is being treated. Children taking these drugs should be monitored regularly to assess their response to treatment and identify possible side effects. If the child experiences any troubling side effects, it is important that parents talk to the doctor to change the treatment plan.

VI. Recommendations

Patient information - create a brochure or other informational materials that patients can receive to better understand the use of corticosteroids, as well as the possible side effects they may face.

Physician education program - organize seminars, training or education sessions for doctors to increase their understanding of the use of these medicines and the management of side effects.

Building a doctor-patient collaboration - encourage open and sensitive communication between doctor and patient to address any concerns or side effects that may arise during treatment.

Monitoring of side effects - establish a system for regular monitoring of side effects of patients receiving corticosteroids, including assessment of blood sugar levels, blood pressure and other health changes.

Improving diagnostics and alternative treatment - support the research and development of alternatives for the treatment of conditions that require the use of corticosteroids, as well as diagnostic methods that may reduce the need for their use in some cases.

These recommendations will help improve the management of corticosteroid use and reduce potential side effects for patients

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