Advanced Pharmacology

Name

[Institutional Affiliation(s)]

Author Note

Advanced Pharmacology

**Response 1**

Children should be treated as children not as small adults. Their weight, age, and surface area need accurate and appropriate dosing. Different psychological conditions occur in response to the composition of the body in children such as body fat and hormones. These changes in children require suitable and appropriate dosing of medicines. Specific medicines should be prescribed to the children as and when required such as inherited diseases and structural deformities. There are different pharmacokinetic and pharmacodynamic changes that occur in response to the medicine dose; therefore, children need a suitable dose appropriate for their illness and disorder. They should be prescribed with off-label medicines according to the laws. Off-label medicines prescribed in children are atenolol used for hypertension in children and also Sildenafil which is used for pulmonary hypertension in children (Lee, 2018). There are specified laws that need to be followed when prescribing drugs to children for example, under a certain age, children should not be prescribed off-label medicines.

**Response 2**

The most important factor for the use of off-label medicines in children is the non-availability of licensed medicines. Also, safe and effective therapeutic medicines are often not available for children. The absence of relative information regarding rules and regulations for prescribing medicines to children in healthcare facilities is another reason for this use (Gore et al., 2017). For example, age-related information is available for physicians and healthcare providers, also information regarding weight-specific medicines should be shared in the healthcare facilities (Kruger, 2017). Contraindications should be given to the staff and nurses to safely use the medicines for children (Mukattash et al., 2018). Children are vulnerable to illness and disease; therefore, physicians should apply evidence-based practices and knowledge when prescribing off-label medicines to the children (Schrier et al., 2020). Professional knowledge and drug-related information should be completely guided to the healthcare facility members for the safe use of off-label medicines.

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