

The Impact of a Commercially Available Medication Flavoring System (FLAVORx®) on Pediatric Inpatients Admitted to a Children's Hospital

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Objective

- ❖ The primary purpose of this study was to evaluate the use of a commercially available medication flavoring system (FLAVORx®) in pediatric inpatients, and to see if its inclusion not only increased compliance, but also reduced stress in taking medication.
- ❖ Key endpoints measured were the patients' adherence to medication, inappropriate doses given to children on a mg/kg basis due to dosage formulation changes, and quality of life issues related to taking medication as an inpatient.

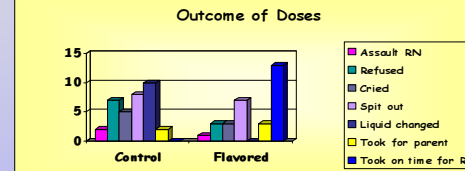
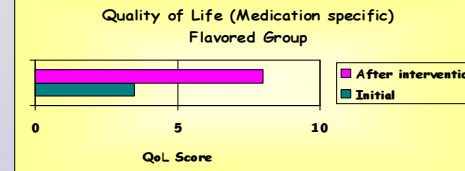
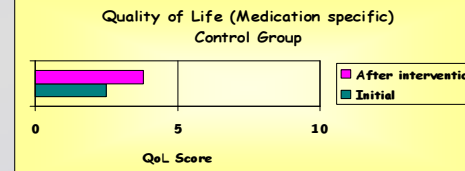
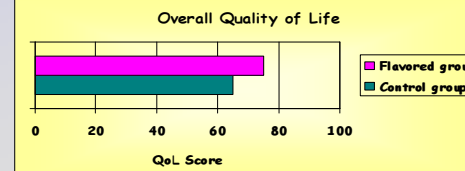
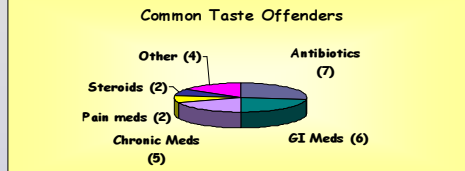
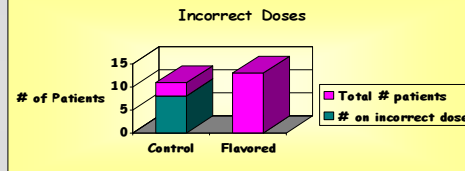
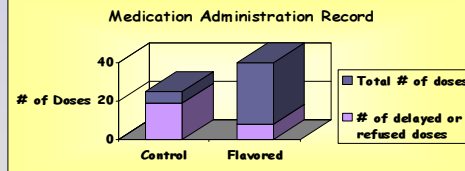
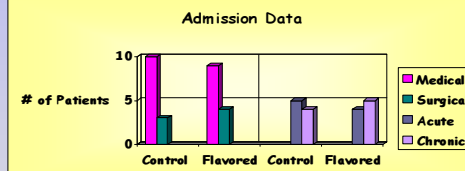
Background

- ❖ Palatability plays an important part in children taking their liquid medications. Masking the bitterness of medications may increase compliance in children if the resulting medication has a better taste.
- ❖ Though the taste of medications is important in the adult population as well, children are not mature enough, in most cases, to realize the importance of taking their medications on a regular basis as adults do.
- ❖ This in itself lays a bigger challenge for compliance and cost savings in children.

Methods

- ❖ Questionnaires were formulated to determine demographics and to evaluate patients in the areas of compliance and quality of life related to taking bitter medications.
- ❖ Quantify number of doses administered on a timely basis and number of incorrect doses as a result of changed formulation.
- ❖ The inclusion criteria for this study were admission to the hospital and a documented 24-hour history of medication noncompliance due to unpalatable medications.
- ❖ Conventional methods of palatable medication administration, such as crushing a tablet in ice cream or mixing with chocolate or cherry syrup, were used in the Control group.
- ❖ In the Flavored group, the child or parent chose a flavor to use and their doses were individually prepared.

Results



Results

- ❖ The Control group was noncompliant with 76% of their doses as compared to 20% in the Flavored group.
- ❖ In addition, 8 out of 11 children in the Control group had their doses changed from the liquid formulation, leading to 7 overdoses and 1 under dose in medication on a pure mg/kg-dosing basis.
- ❖ No one in the Flavored group had their dose changed to another dosage formulation.
- ❖ All of the patients in the Flavored group reported taking the medication for the nurse in a timely fashion, where no one in the Control group was able to report that on-time dosing occurred for all doses.
- ❖ The Control group had an initial average Quality of Life Score - Medication specific of 2.5 (out of 10). The score increased to an average of 3.8 after instituting conventional methods for taking medication. (i.e. crushing tablet and putting on ice cream)
- ❖ The Flavored group had an initial average Quality of Life Score - Medication specific of 3.5 (out of 10) that increased to an average of 8 after the addition of the Flavoring system.

Conclusions

- ❖ Patients' compliance with medication, inappropriate doses given to children on a mg/kg basis, and quality of life issues related to taking medication as an inpatient were all markedly improved in the 26 patients evaluated.
- ❖ Not only does this save money by reducing the number of wasted (spit out) doses, but it also reduces the strains of being in an unfamiliar hospital environment.