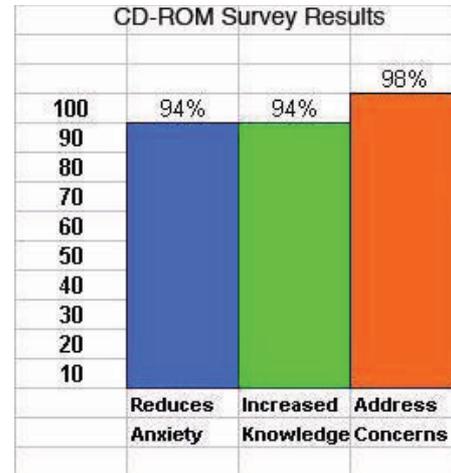


S-89.**TITLE: EVALUATION OF GINNY AND ERNIE'S SURGICAL DAY: A GUIDE TO PEDIATRIC ANESTHESIA****AUTHORS:** M. P. Carson¹, M. Wood², R. Kazim², L. Sun²;**AFFILIATION:** ¹Columbia University, New York, NY, ²Columbia University College of Physicians and Surgeons, New York, NY.**INTRODUCTION:** Preoperative care and anesthesia administration can be a source of anxiety for pediatric patients. Parents wanted information about anesthesia including risks and presurgical assessment (1). A previous study had shown that patients educated with video tapes prior to surgery were more relaxed and better informed. (2). We designed an interactive CD-ROM for home use by parents and children that is simple to operate, fun, informative, and easy to understand. It aims to inform children and their families about issues regarding anesthesia and improve their experience. To test the effectiveness of this CD-ROM, we designed a 9 question survey and distributed to the families who received the CD-ROM.**METHODS:** After IRB approval, we approached all families receiving our CD-ROM to perform the following assessment: pre-CD-ROM knowledge of pediatric anesthesia, post CD-ROM knowledge of pediatric anesthesia and patient satisfaction in this group. The four areas we assessed were (a) perioperative anxiety (b) knowledge of pediatric anesthesia (c) addressing concerns (d) the overall quality of the content. In the first three areas, we requested a yes or no response, and applied a Likert scale from 1-10 (10=excellent) for the overall quality of the content.**RESULTS:** A total of 250 CD-ROM were distributed over the past year: 59% were cardiac surgical patients and 41% were urological patients - the two services with the greatest volume. 100 questionnaires have been returned to date. An overwhelming positive results was solicited in all three areas: Perioperative anxiety (94%), knowledge of pediatric anesthesia (98%), and addressing concerns (98%). The overall quality of the contents was 8.75+/- 1.57.**DISCUSSION:** Our results demonstrate that this CD-ROM is a useful adjunct in providing information. Our results demonstrate that this CD-ROM is an useful adjunct in providing information. Based on our survey response, the results were positive. Families are better prepared to provide histories of medical problems and the use of medications at home since the CD-ROM contains a section dealing with medical backgrounds including forms that can be filled out at home. Our goal is that the continued use of this helpful guide would significantly improve patient satisfaction.**REFERENCES:**

1. Elsevier Ireland Ltd., Patient Education and Counseling 59 (2005) p.118,123
2. J. Clin. Anesth., vol.2, p. 172, May/June 1990
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S-90.**TITLE: A MINITAB MACRO FOR NONPARAMETRIC POST HOC PAIR-WISE COMPARISONS AFTER FRIEDMAN'S TEST AND KRUSKAL-WALLIS TEST****AUTHORS:** S. Mantha¹, M. F. Roizen², J. F. Foss²;**AFFILIATION:** ¹Nizam's Institute of Medical Sciences, Hyderabad, India, ²Cleveland Clinic Foundation, Cleveland, OH.**INTRODUCTION:** Nonparametric analysis of variance (ANOVA) of data between more than two groups requires the use of Friedman's test for repeated measures (comparison of data at different time periods in a particular group) and the use of the Kruskal-Wallis test for independent measures (comparison of data in different independent groups). Statistical significance, if obtained in the initial ANOVA, indicates that at least one of the conditions differs from at least one other condition. It does not tell the researcher which one is different, nor does it tell how many groups are different from each other. Such inference requires the use of post hoc pair-wise comparisons.¹ Although the computational scheme for post hoc pair-wise comparisons analysis is easy to comprehend, the algebraic calculations are tedious for repeated use.**METHODS:** Minitab (Minitab Inc., State College, Pennsylvania) is statistical software widely used for medical applications. Although Minitab software does not provide facilities for post hoc pair-wise comparisons after Friedman's test or Kruskal-Wallis test, the software allows one to write macros. A macro is a set of commands, prepared in text file format and stored in a file, to automate various calculations. We describe Minitab macros (for Release 10 and above) to perform post hoc pair-wise comparisons after the Friedman's test and the Kruskal-Wallis test. The macro for pair-wise comparisons after Friedman's test uses input from two columns in the Minitab's worksheet: one column with sample size being located in its first row and rank sums in another column. The macro for pair-wise comparisons after the Kruskal-Wallis test also uses input from two columns in the Minitab's worksheet: one column with sample sizes and average ranks in another column. After the macro is invoked, the user is asked whether the all pair-wise comparisons are required or only comparisons with the baseline value are required. After the appropriate response from the user, the macro

performs the required calculations and yields an output. The macro was validated using several sets of data coupled with manual calculations and using illustrative data from textbooks.

RESULTS: Macro validation revealed satisfactory performance of the macro coupled with speed. For example, the analysis for 100 pairwise comparisons takes few seconds.**DISCUSSION:** Commonly used statistical packages do not have built-in functions to do the pairwise comparisons, but there are macros available in SAS and S-plus (function) to do such pairwise comparisons after Kruskal-Wallis. In the case requiring comparisons after Friedman's, test statistical experts tend to program in SAS or other similar packages. Following the presentation of this abstract, the macro will be made available on the personal website of the first author.**REFERENCE**

1. Siegel S, Castellan NH. Nonparametric statistics for the behavioral sciences. 2nd ed. New York: McGraw-Hill, Inc, 1988.