

# محاضرات إحصاء طبي / عملي 1

المرحلة الثانية

قسم التخدير

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# **Medical Statistics**

## **Objectives**

- 1. Learn about SPSS
- 2. The importance of SPSS
- 3. Features of SPSS Program
- 4. Open SPSS
- 5. SPSS Menus and Icons

#### What is SPSS?

SPSS Statistics (abbreviation for Statistical Package for Social Sciences) is a powerful statistical software platform. It offers a user-friendly interface and a robust set of features that lets your organization quickly extract actionable insights from your data. Advanced statistical procedures help ensure high accuracy and quality decision-making. All facets of the analytics lifecycle are included, from data preparation and management to analysis and reporting.

#### The importance of SPSS:

The statistical analysis program (SPSS) is one of the most important programs used in statistical analysis, especially as it is a number of comprehensive packages that will perform the data analysis process. It is worth noting that this program is used in researches that contain accounts, numbers, and data Statistical and numerical, where the statistical analysis program (SPSS) can read all the data.

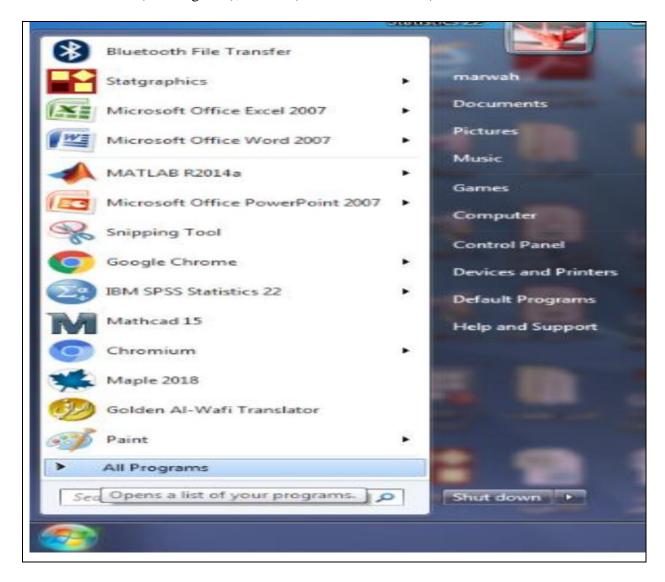
### **Features of SPSS Program**

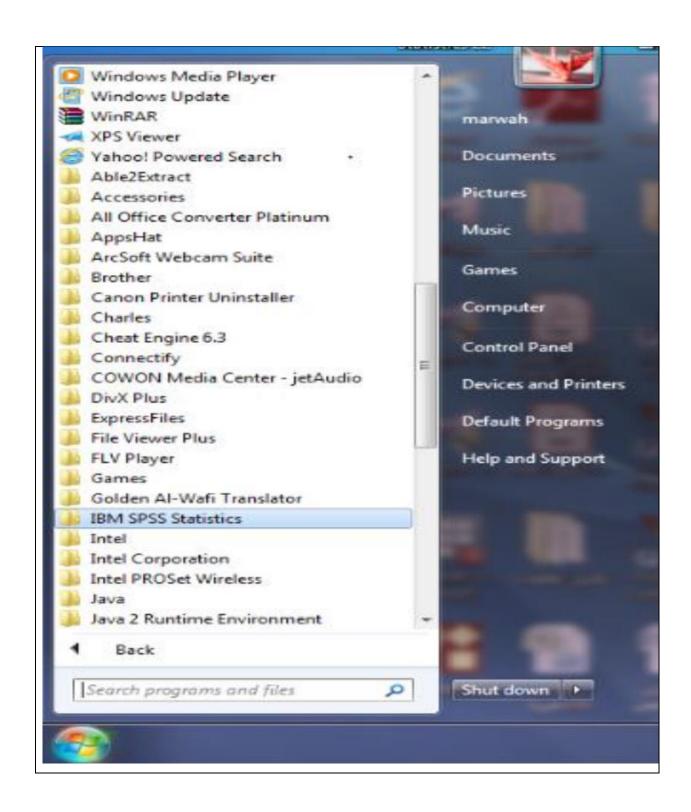
- 1. Very easy to handle and use, suitable for all levels of users.
- 2. Analysis can be done using menus without the need to write commands.
- 3. It can handle almost all types of files.

4. Excels in descriptive statistics, regression analysis, and variance analysis.

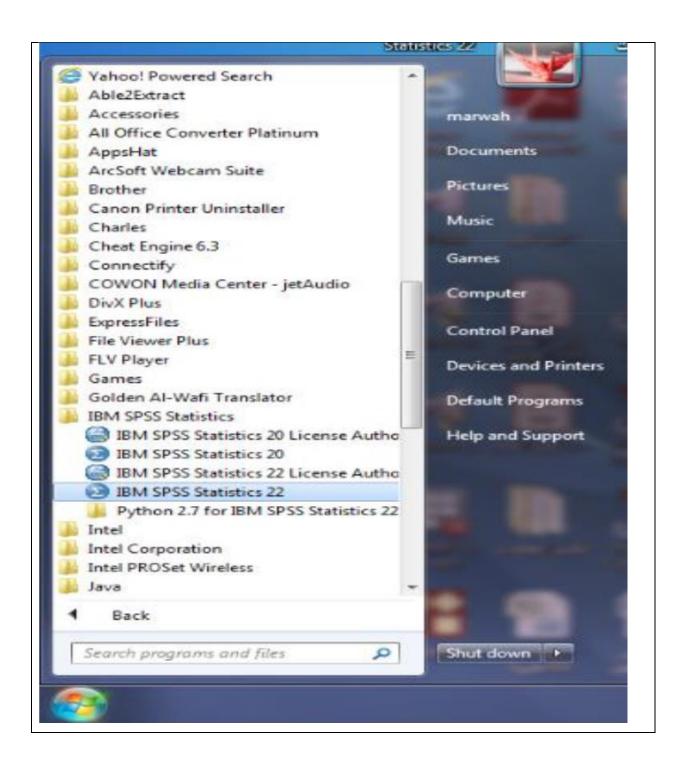
# **Open SPSS**

- 1. Open the menu (Start).
- 2. From the menu (All Programs), choose (IBM SPSS Statistics) as shown below.

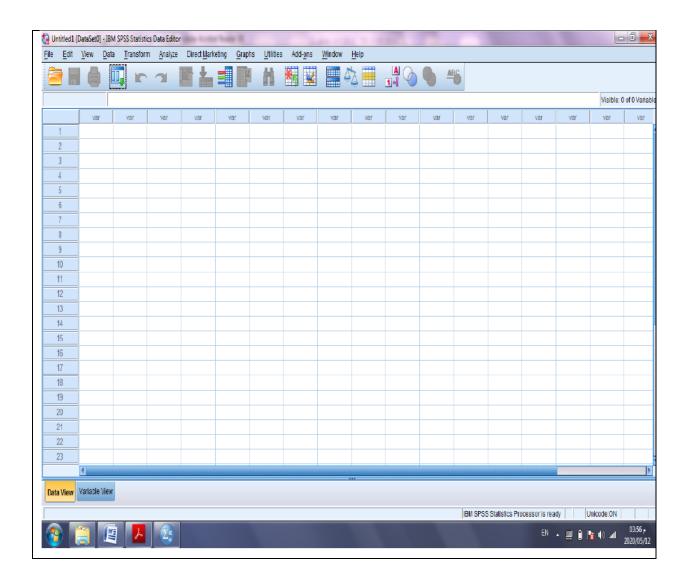




3. Then choose (IBM SPSS Statistics 22) as shown in the figure below

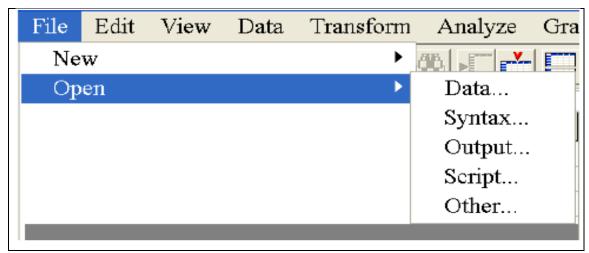


4. The main window of the program will as show in the figure below.



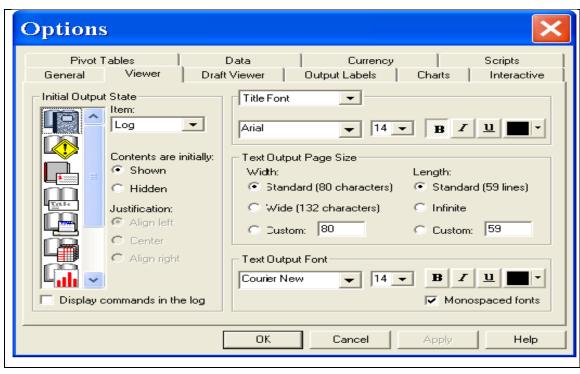
## **SPSS Menus and Icons**

1. **File** includes all the options you typically use in other programs, such as open, save, exit. Notice, that you can open or create new files of multiple types, as illustrated to the right.



2. **Edit** includes the typical cut, copy, and paste commands, and allows you to specify various options for displaying data and output.

Click on Options, and you will see the dialog box to the left. You can use this to format the data, output, charts, etc.



- 3. **View** allows you to select which toolbars you want to show, select font size, add or remove the gridlines that separate each piece of data, and select whether or not to display your raw data or the data labels.
- 4. **Data** allows you to select several options ranging from displaying data that is sorted by a specific variable to selecting certain cases for subsequent analyses.
- 5. **Transform** includes several options to change current variables. For example, you can change continuous variables to categorical variables, change scores into rank scores, add a constant to variables, etc.
- 6. **Analyze** includes all of the commands to carry out statistical analyses and to calculate descriptive statistics. Much of this book will focus on using commands located in this menu.
- 7. **Graphs** includes the commands to create various types of graphs including box plots, histograms, line graphs, and bar charts.
- 8. **Utilities** allows you to list file information which is a list of all variables, their labels, values, locations in the data file, and type.
- 9. **Add-ons** are programs that can be added to the base SPSS package.
- 10. **Window** can be used to select which window you want to view (i.e., Data Editor, Output Viewer, or Syntax). Select Window/Data Editor. Then select Window/SPSS Viewer.
- 11. **Help** has many useful options including a link to the SPSS homepage, a statistics coach, and a syntax guide. Using topics, you can use the index option to type in any keyword and get a list of options, or you can view the categories and subcategories available under contents. This is an excellent tool and can be used to troubleshoot most problems.