Data: Quality of life for young adults with diabetes, measured on 100 point scale from 0 (worst quality of life) to 100 (perfect quality of life).

In Excel it is simplest to create a Histogram using the Data Analysis Tool Pack. Select *Histogram* from the Data Analysis dialogue box to open the Histogram dialogue box.

Fo	rmular [Data Re	view Vie	w T	eam										
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This will open up the following dialogue box:

	Tells EXCEL want to produ case it's in Co	uce the his	togram fo	or. In this	
If left blank, EXCEL will	Histogram		? ×		
divide the data into bins	Input				
(the vertical bars on the	Input Range:	D1:D110	1	OK	
histogram)	Bin Range:		1	Cancel	
Lets EXCEL know that the	🔽 Labels		Help		
input range contains labels	Output options				
(usually in the first row)	Output Range:	I1	1		
Talla EXOEL subara ta aut	New Worksheet Ply:				
Tells EXCEL where to put the output, in this case it	New Workbook				
starts in Column I, row 1	Pareto (sorted histogram)				
	Cumulative Percentage				
This must be checked if 🚄	. ☑ Chart Output				
you want a chart to be produced)	







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Bin	Frequency							
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83.695	17			45.65 51.085	56.52 61.955 67.39	72.825 78.26 83.695	89.13 94.565 More	
89.13	24					Bin		
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More	9							

And here's the output:

The histogram that has been produced will need to be edited as technically it is a bar chart as there are gaps between the bins (vertical bars). It could also do with some more meaningful labels and removing unnecessary content such as the title 'Histogram'. To start with, to change the number of decimal places displayed on the horizontal axis, highlight the data in the 'Bins' column, and click on the symbol highlighted in the figure below. Note that these numbers represent the start of the category, not the midpoint.



Next you can start to edit the chart to remove the spaces, change the labels, add/remove labels, add gridlines, even change the colour and font size of the text. To do this, click on the chart and then click on the element within the chart that you want to edit. For example let's change the X axis label from 'Bin' to something meaningful such as 'Quality of life at baseline'. Click on the label 'Bin'. If you can't immediately edit the word 'Bin' click on it again and you should now be able to edit it and change it to 'Quality of life at baseline'.







Once you click on the chart, you will notice that the Chart Tools menu appears on the top



You can use this to edit the chart. For example, if you click on the 'Layout' tab one of the things that you can add is gridlines:



To remove the gaps between the bars, double click on one of the bars and you should get the following dialogue box opening up. Slide the Gap width slider to the left 'No Gap' and click close:







To change the font size of any of the numbers and text on the graph, click on that element and then in the main home tab of EXCEL use the Font menu to edit:



You can remove unnecessary items such as the label 'Frequency' on the right and the title 'Histogram' by clicking on the element and pressing the delete key on your computer keyboard. Or you can edit the title to be more meaningful. And finally you can change the colour of the bars by clicking on the bars and in the 'Format' tab using the "Shape Fill' and 'Shape Outline' dialogue boxes







