TOD

## one\_way\_anova

(0.11305435281558858, 0.8931091575009511)

## t\_test

t\_statistic p\_value  
pre\_diabetes vs no\_diabetes 0.207233 0.835858  
diabetes vs no\_diabetes 0.457008 0.647734

## tukey\_hsd

Multiple Comparison of Means - Tukey HSD, FWER=0.05   
==============================================================  
 group1 group2 meandiff p-adj lower upper reject  
--------------------------------------------------------------  
 diabetes no\_diabetes -0.0033 0.8925 -0.0206 0.0139 False  
 diabetes pre\_diabetes -0.0017 0.9856 -0.0257 0.0224 False  
no\_diabetes pre\_diabetes 0.0017 0.9776 -0.0177 0.021 False  
--------------------------------------------------------------

## covariance\_analysis

sum\_sq df F PR(>F)  
C(no\_diabetes) 0.000105 1.0 0.010157 0.919735  
C(pre\_diabetes) 0.001375 1.0 0.133317 0.715065  
C(diabetes) 0.001661 1.0 0.161025 0.688268  
Age 0.109964 1.0 10.660925 0.001117  
Residual 16.709734 1620.0 NaN NaN

## interaction\_analysis

sum\_sq df F PR(>F)  
C(no\_diabetes) 0.008930 1.0 0.865713 0.352284  
C(pre\_diabetes) 0.010301 1.0 0.998646 0.317788  
C(diabetes) 0.001661 1.0 0.161016 0.688276  
Age 0.109964 1.0 10.660342 0.001117  
C(diabetes):Age 0.009402 1.0 0.911466 0.339868  
Residual 16.700333 1619.0 NaN NaN

## interaction\_analysis2

dfn dfd F PR(>F)  
diabetes 1.0 1487.0 1.514718 0.218615  
pre\_diabetes 1.0 1494.0 0.003360 0.953784

## chi\_square\_test

condition chi2 p\_value dof  
0 no\_diabetes 0.027188 0.869032 1  
1 pre\_diabetes 0.000000 1.000000 1  
2 diabetes 0.006323 0.936620 1

## relative\_risk\_analysis

condition relative\_risk ci p\_value  
0 no\_diabetes 0.009917 0.005616 3.026706e-57  
1 pre\_diabetes 0.011628 0.002885 1.887110e-10  
2 diabetes 0.013333 0.004268 5.481528e-14

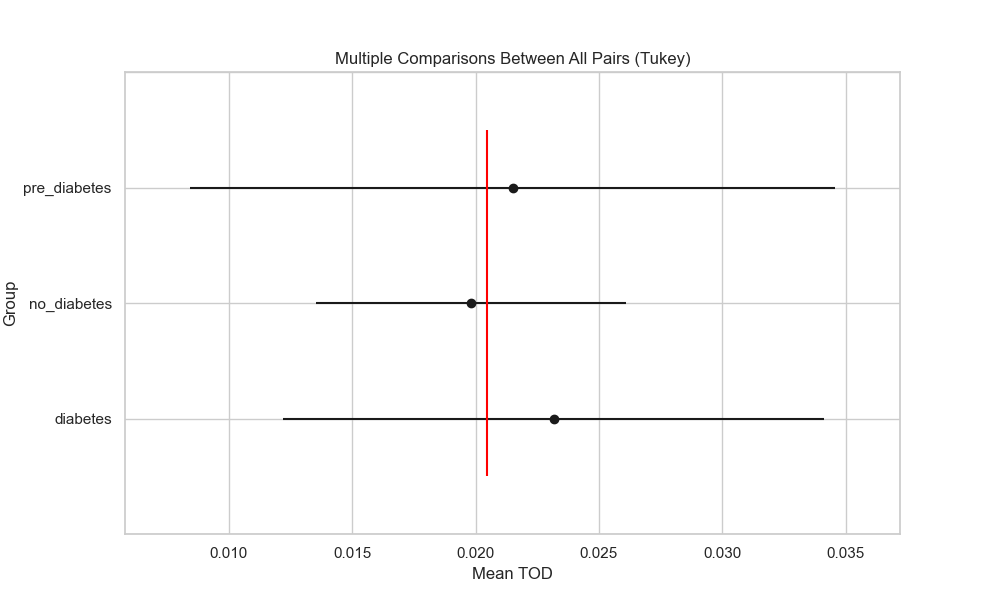
## odds\_ratio\_analysis

condition odds\_ratio ci p\_value  
0 no\_diabetes 1.269941 0.719196 0.584596  
1 pre\_diabetes 0.898955 0.223027 0.702596  
2 diabetes 0.759768 0.243206 0.721688

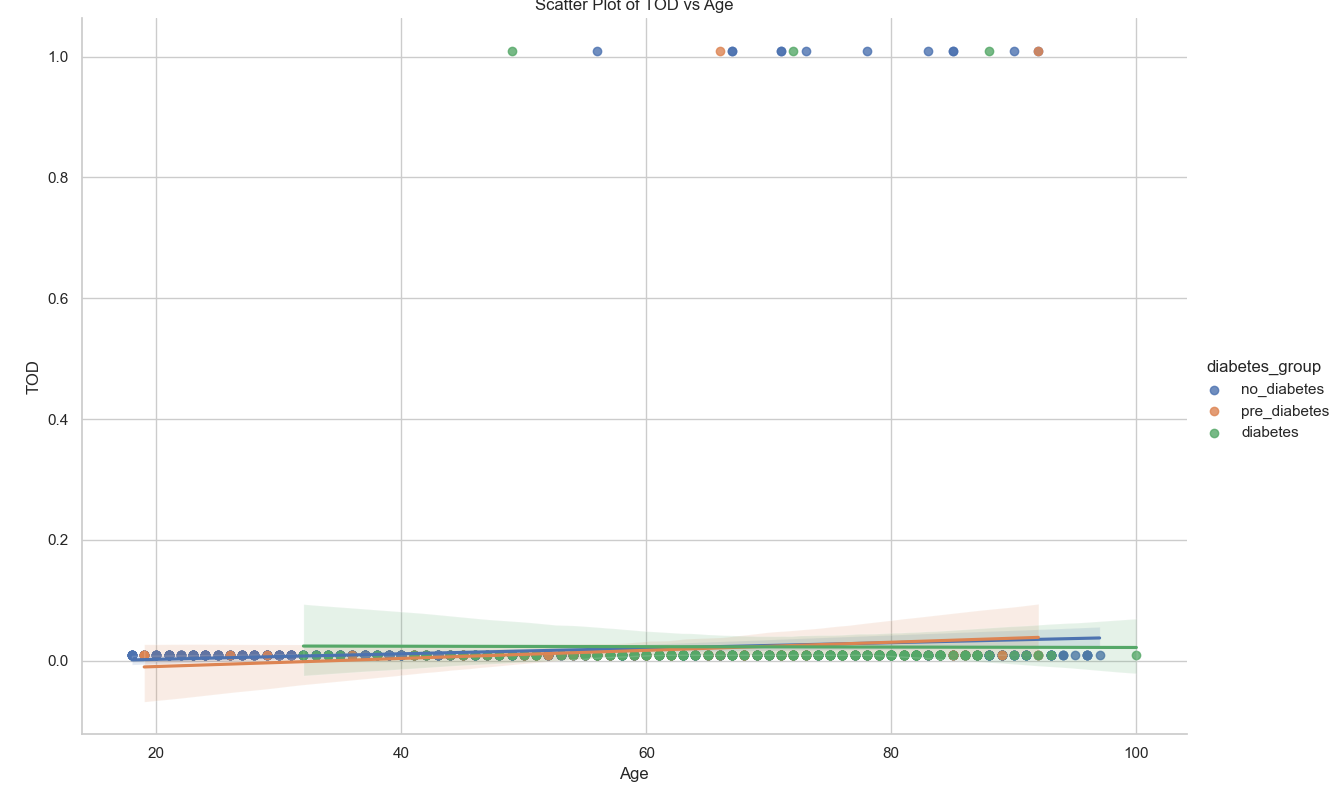
## relative\_risk\_by\_age

age\_group condition relative\_risk p\_value confidence\_interval  
3 40-60 No Diabetes 3.838710 0.373045 0.539253  
4 40-60 Pre-Diabetes inf 1.000000 NaN  
5 40-60 Diabetes 0.097561 0.173371 0.013412  
0 60+ No Diabetes 0.702281 0.784150 0.386691  
1 60+ Pre-Diabetes 0.992568 1.000000 0.245226  
2 60+ Diabetes 1.714074 0.748373 0.425370

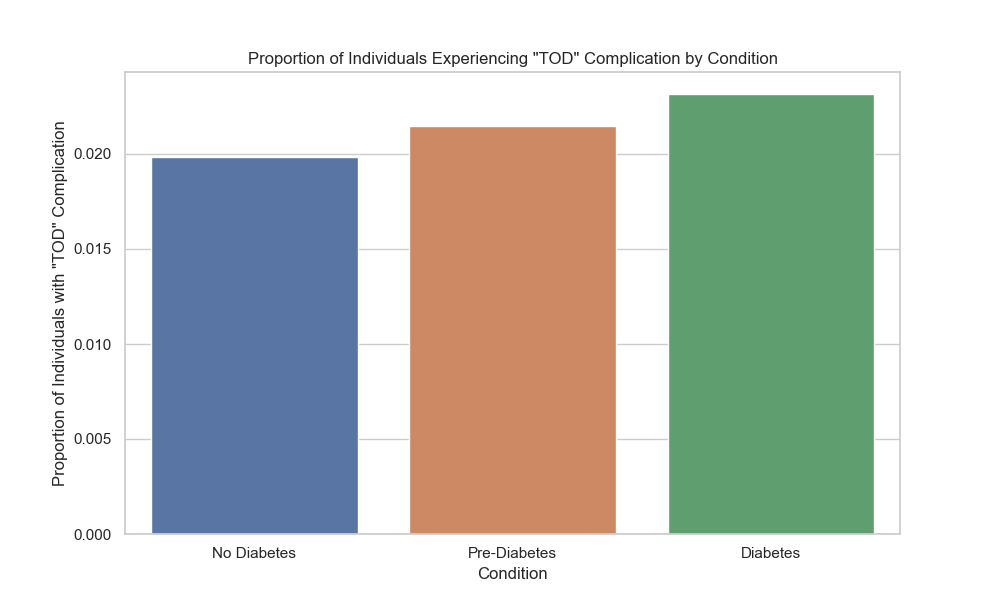
## visualize\_tukey\_results



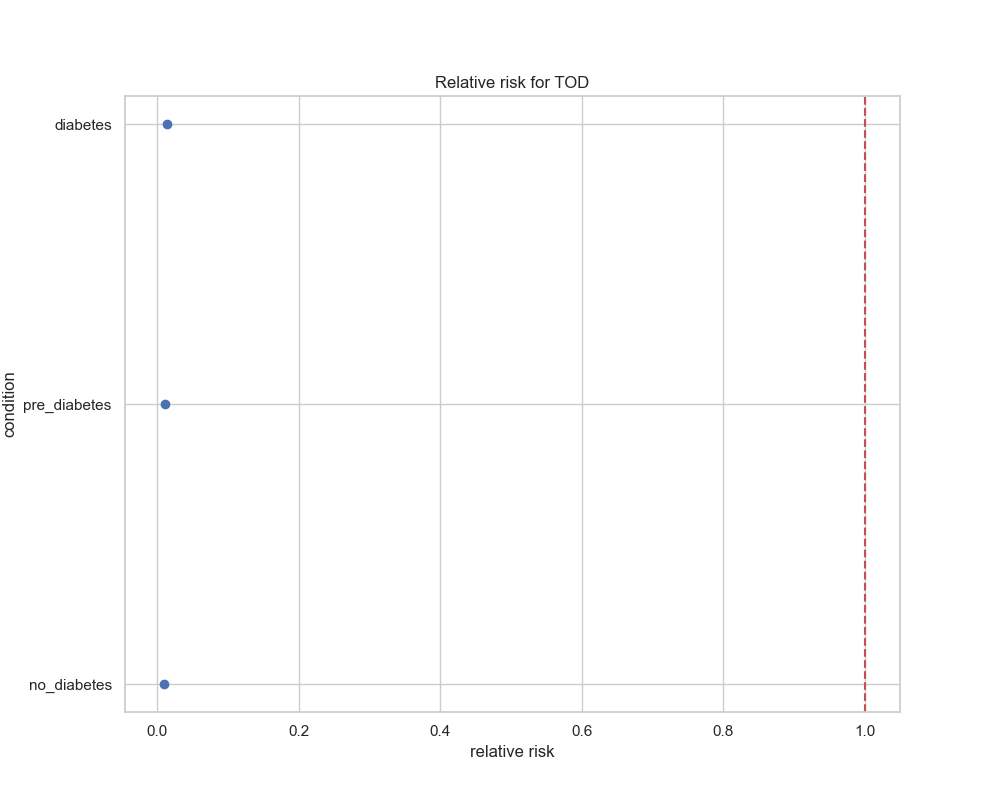
## plot\_interaction\_analysis



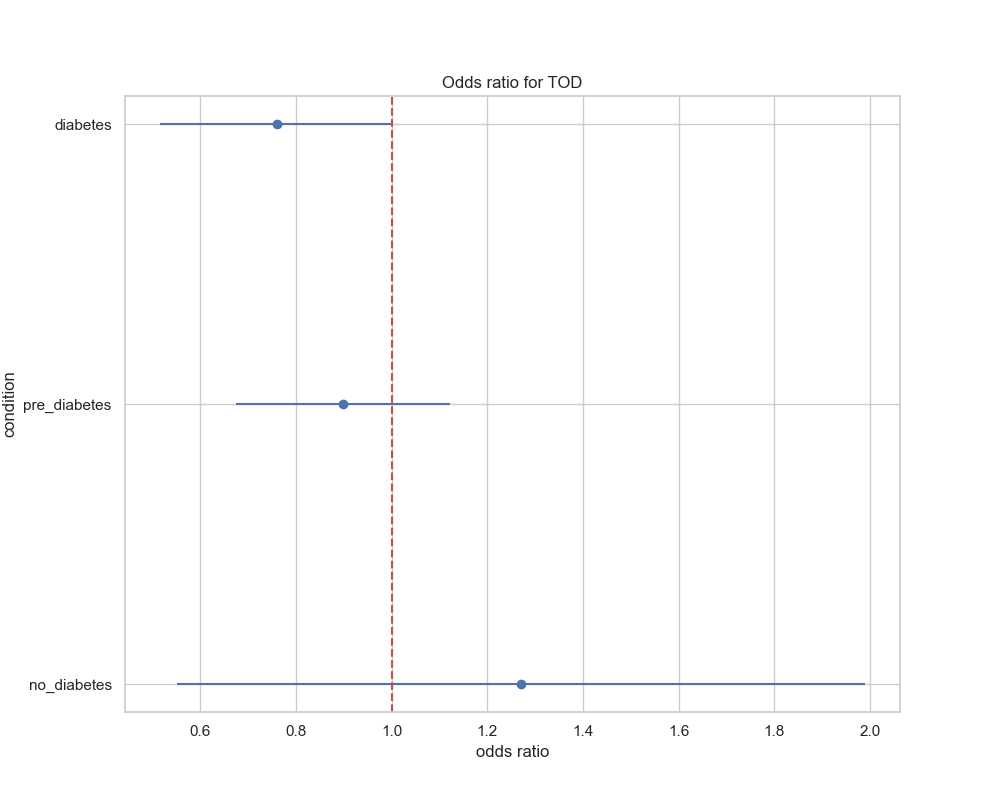
## visualize\_chi\_square\_results



## visualize\_relative\_risk\_results



## visualize\_odds\_ratio\_results



## visualize\_relative\_risk\_by\_age\_results

