TOD

## one\_way\_anova

(1.0303050016944557, 0.3574207647988519)

## t\_test

t\_statistic p\_value  
pre\_diabetes vs no\_diabetes -1.330839 0.183758  
diabetes vs no\_diabetes -0.703101 0.482275

## tukey\_hsd

Multiple Comparison of Means - Tukey HSD, FWER=0.05   
==============================================================  
 group1 group2 meandiff p-adj lower upper reject  
--------------------------------------------------------------  
 diabetes no\_diabetes 0.0102 0.7294 -0.0214 0.0417 False  
 diabetes pre\_diabetes -0.0077 0.8837 -0.0462 0.0307 False  
no\_diabetes pre\_diabetes -0.0179 0.3592 -0.0487 0.0129 False  
--------------------------------------------------------------

## covariance\_analysis

sum\_sq df F PR(>F)  
C(no\_diabetes) 0.033947 1.0 1.817329 0.178054  
C(pre\_diabetes) 0.054862 1.0 2.936990 0.087001  
C(diabetes) 0.023785 1.0 1.273322 0.259519  
Age 0.186076 1.0 9.961448 0.001665  
Residual 13.505355 723.0 NaN NaN

## interaction\_analysis

sum\_sq df F PR(>F)  
C(no\_diabetes) 0.006768 1.0 0.361837 0.547677  
C(pre\_diabetes) 0.015116 1.0 0.808112 0.368979  
C(diabetes) 0.023785 1.0 1.271565 0.259848  
Age 0.186076 1.0 9.947703 0.001677  
C(diabetes):Age 0.000045 1.0 0.002408 0.960877  
Residual 13.505310 722.0 NaN NaN

## interaction\_analysis2

dfn dfd F PR(>F)  
diabetes 1.0 592.0 3.351329 0.067653  
pre\_diabetes 1.0 591.0 4.740166 0.029861

## chi\_square\_test

condition chi2 p\_value dof  
0 no\_diabetes 1.164645 0.280504 1  
1 pre\_diabetes 0.780601 0.376957 1  
2 diabetes 0.009101 0.923999 1

## relative\_risk\_analysis

condition relative\_risk ci p\_value  
0 no\_diabetes 0.025404 0.013964 1.241839e-33  
1 pre\_diabetes 0.006897 0.000965 3.530818e-07  
2 diabetes 0.014815 0.003667 1.677546e-09

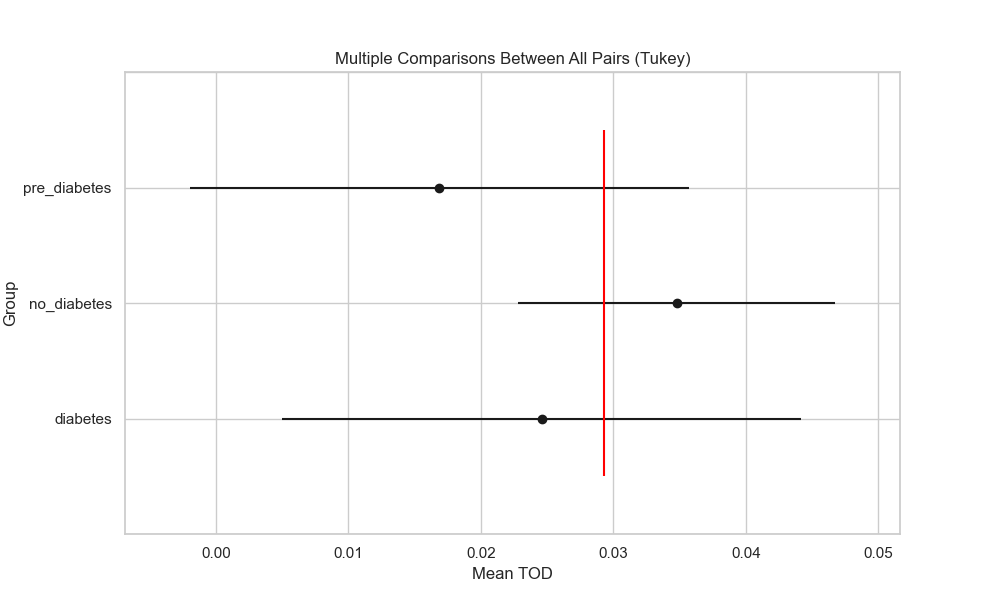
## odds\_ratio\_analysis

condition odds\_ratio ci p\_value  
0 no\_diabetes 0.421753 0.231831 0.268285  
1 pre\_diabetes 3.318662 0.464335 0.322613  
2 diabetes 1.401384 0.346916 1.000000

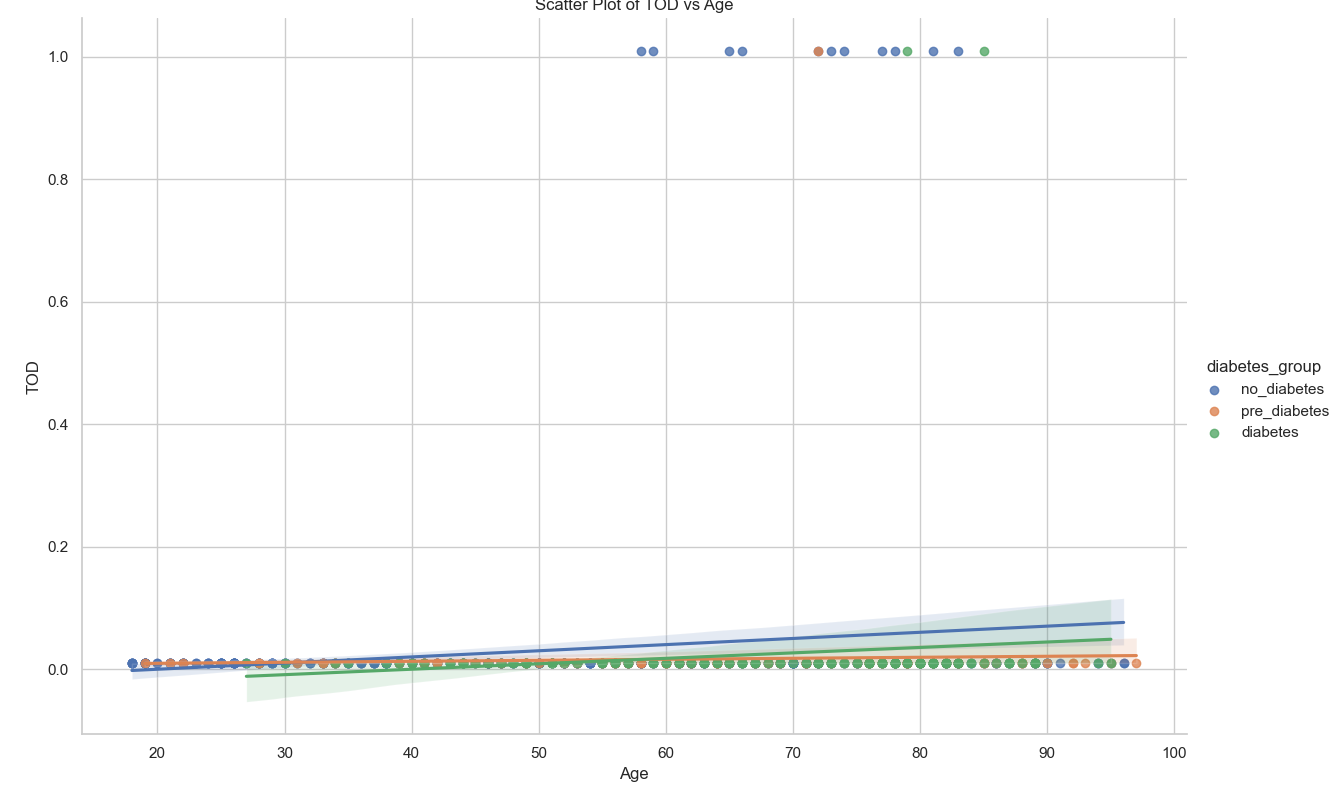
## relative\_risk\_by\_age

age\_group condition relative\_risk p\_value confidence\_interval  
3 40-60 No Diabetes 0.000000 0.534410 0.000000  
4 40-60 Pre-Diabetes inf 1.000000 NaN  
5 40-60 Diabetes inf 1.000000 NaN  
0 60+ No Diabetes 0.327928 0.139730 0.167924  
1 60+ Pre-Diabetes 3.626812 0.307414 0.505428  
2 60+ Diabetes 1.721612 0.737849 0.424302

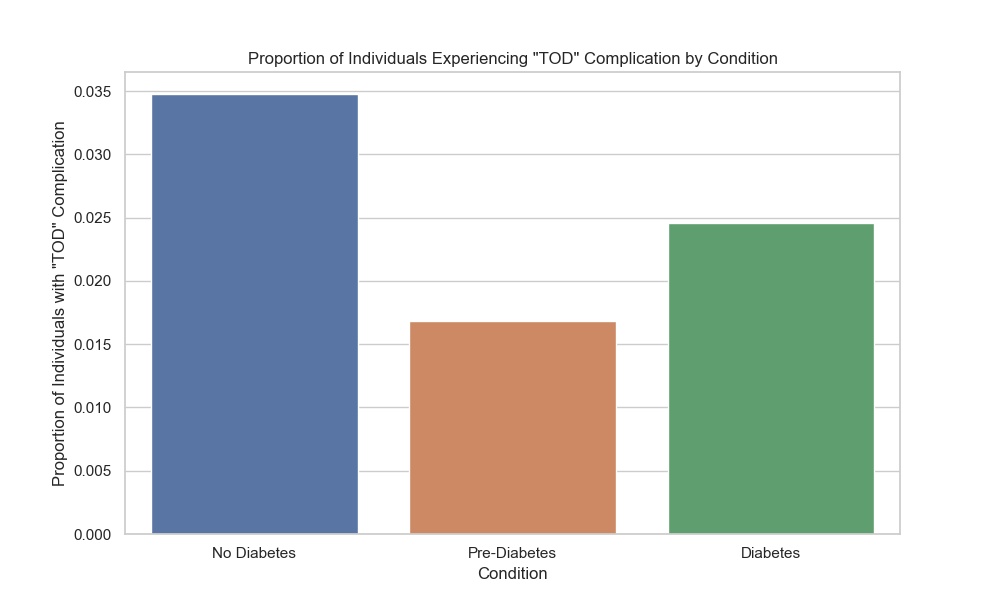
## visualize\_tukey\_results



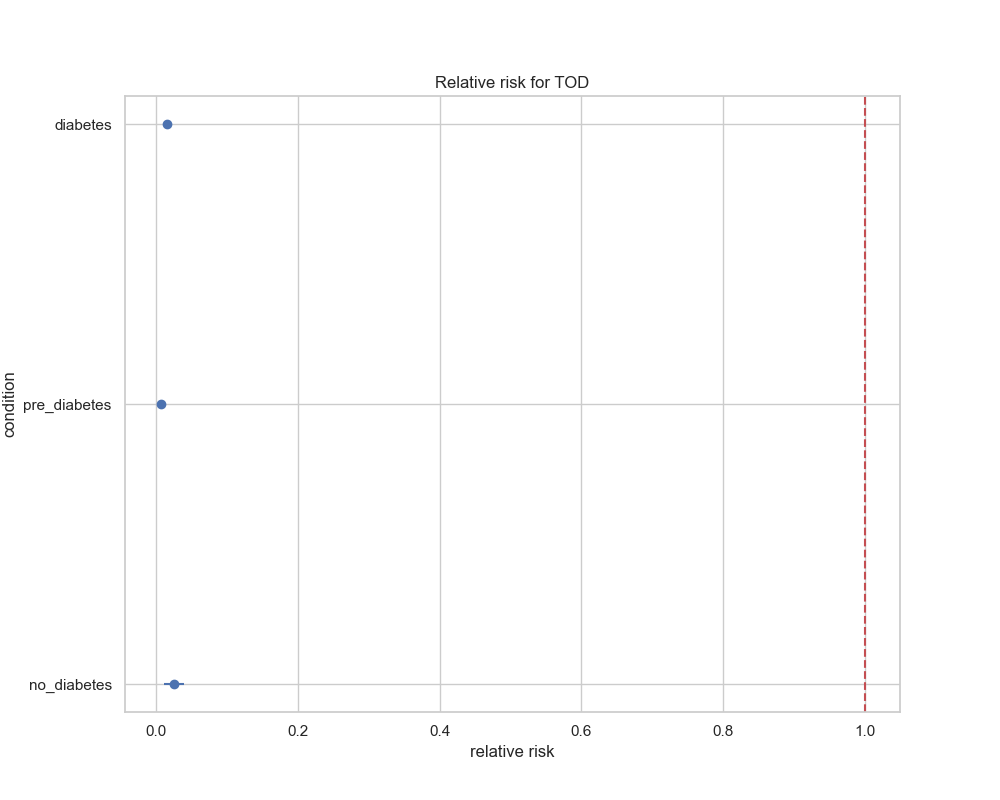
## plot\_interaction\_analysis



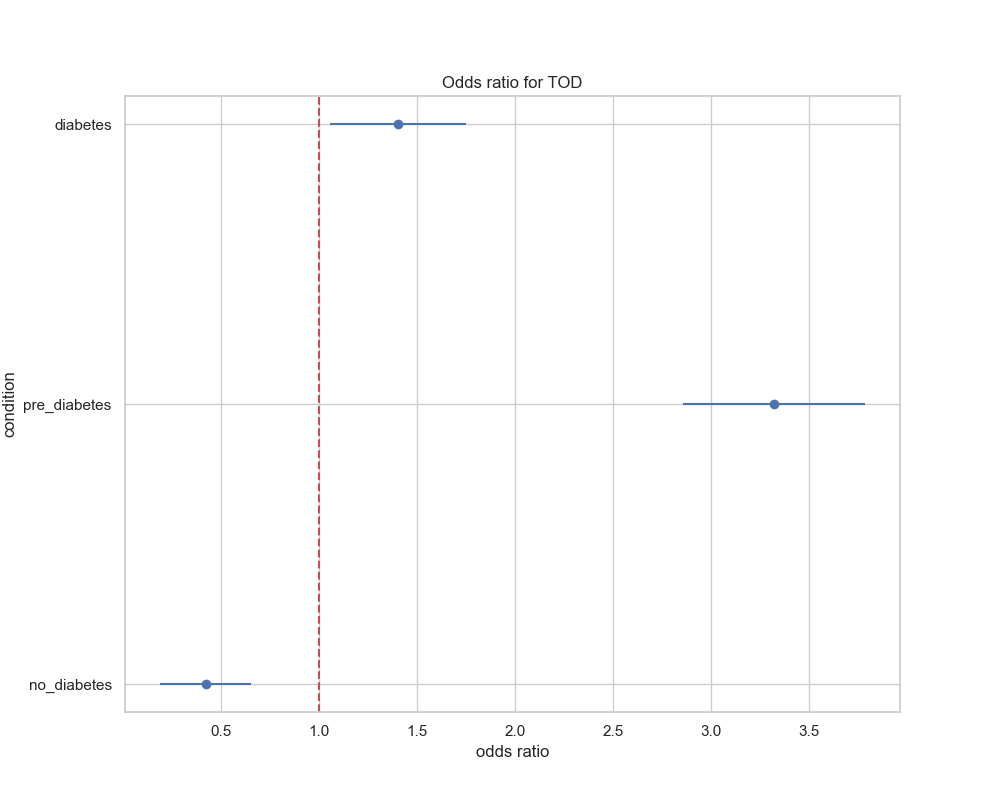
## visualize\_chi\_square\_results



## visualize\_relative\_risk\_results



## visualize\_odds\_ratio\_results



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

