Fall

## one\_way\_anova

(1.4643342192622864, 0.23153759978231395)

## t\_test

t\_statistic p\_value  
pre\_diabetes vs no\_diabetes -0.555115 0.578905  
diabetes vs no\_diabetes 1.514273 0.130175

## tukey\_hsd

Multiple Comparison of Means - Tukey HSD, FWER=0.05   
==============================================================  
 group1 group2 meandiff p-adj lower upper reject  
--------------------------------------------------------------  
 diabetes no\_diabetes -0.0246 0.2753 -0.0623 0.013 False  
 diabetes pre\_diabetes -0.0343 0.2765 -0.0869 0.0183 False  
no\_diabetes pre\_diabetes -0.0097 0.8532 -0.052 0.0326 False  
--------------------------------------------------------------

## covariance\_analysis

sum\_sq df F PR(>F)  
C(no\_diabetes) 0.011188 1.0 0.229682 6.318241e-01  
C(pre\_diabetes) 0.177769 1.0 3.649425 5.626495e-02  
C(diabetes) 0.000176 1.0 0.003611 9.520910e-01  
Age 1.493078 1.0 30.651394 3.596536e-08  
Residual 78.912761 1620.0 NaN NaN

## interaction\_analysis

sum\_sq df F PR(>F)  
C(no\_diabetes) 0.017135 1.0 0.351690 5.532407e-01  
C(pre\_diabetes) 0.006443 1.0 0.132232 7.161761e-01  
C(diabetes) 0.000176 1.0 0.003610 9.520961e-01  
Age 1.493078 1.0 30.644867 3.608764e-08  
C(diabetes):Age 0.031916 1.0 0.655066 4.184263e-01  
Residual 78.880845 1619.0 NaN NaN

## interaction\_analysis2

dfn dfd F PR(>F)  
diabetes 1.0 1487.0 1.244325 0.264819  
pre\_diabetes 1.0 1494.0 0.667353 0.414106

## chi\_square\_test

condition chi2 p\_value dof  
0 no\_diabetes 0.403132 0.525476 1  
1 pre\_diabetes 0.335191 0.562618 1  
2 diabetes 2.145101 0.143026 1

## relative\_risk\_analysis

condition relative\_risk ci p\_value  
0 no\_diabetes 0.052541 0.040615 1.035193e-111  
1 pre\_diabetes 0.041916 0.019678 1.000719e-16  
2 diabetes 0.080569 0.049155 8.429676e-24

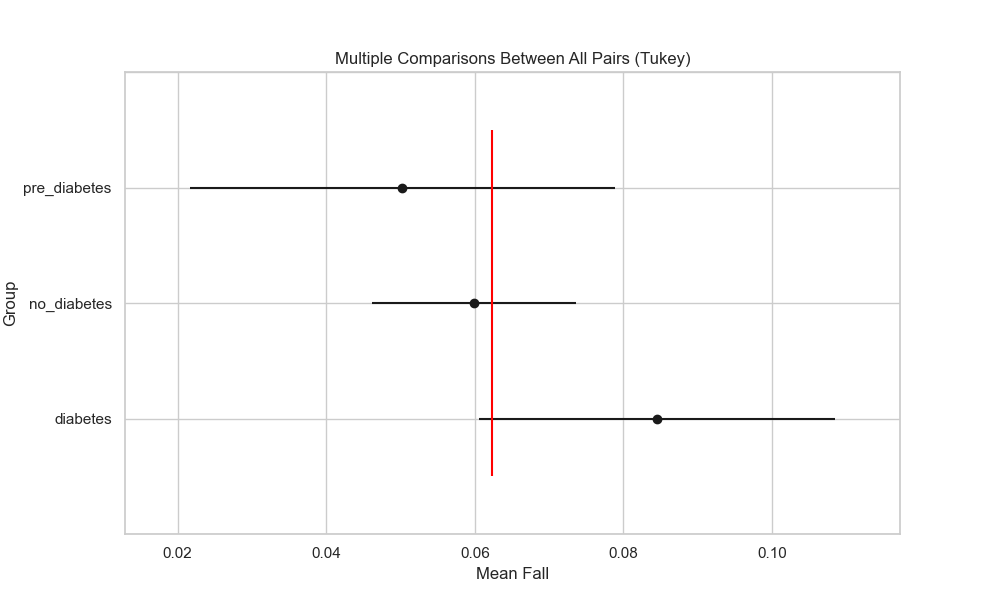
## odds\_ratio\_analysis

condition odds\_ratio ci p\_value  
0 no\_diabetes 1.208431 0.934136 0.440194  
1 pre\_diabetes 1.356310 0.636739 0.588334  
2 diabetes 0.635542 0.387741 0.109079

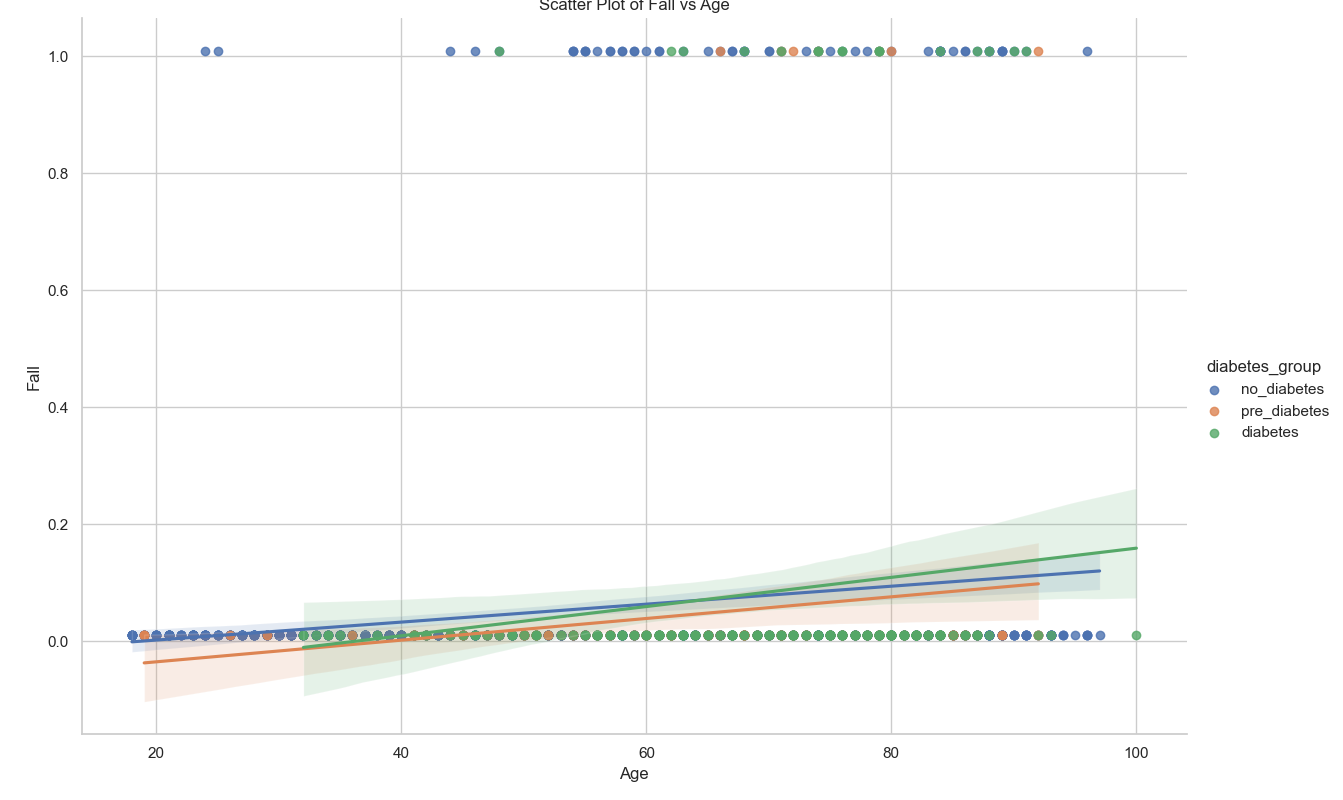
## relative\_risk\_by\_age

age\_group condition relative\_risk p\_value confidence\_interval  
6 18-40 No Diabetes 0.000000 1.000000 0.000000  
7 18-40 Pre-Diabetes inf 1.000000 NaN  
8 18-40 Diabetes inf 1.000000 NaN  
3 40-60 No Diabetes 0.215686 0.139687 0.132523  
4 40-60 Pre-Diabetes inf 0.249417 NaN  
5 40-60 Diabetes 1.725888 1.000000 0.237267  
0 60+ No Diabetes 1.069065 0.787161 0.780846  
1 60+ Pre-Diabetes 1.287564 0.703456 0.599491  
2 60+ Diabetes 0.785994 0.427497 0.470413

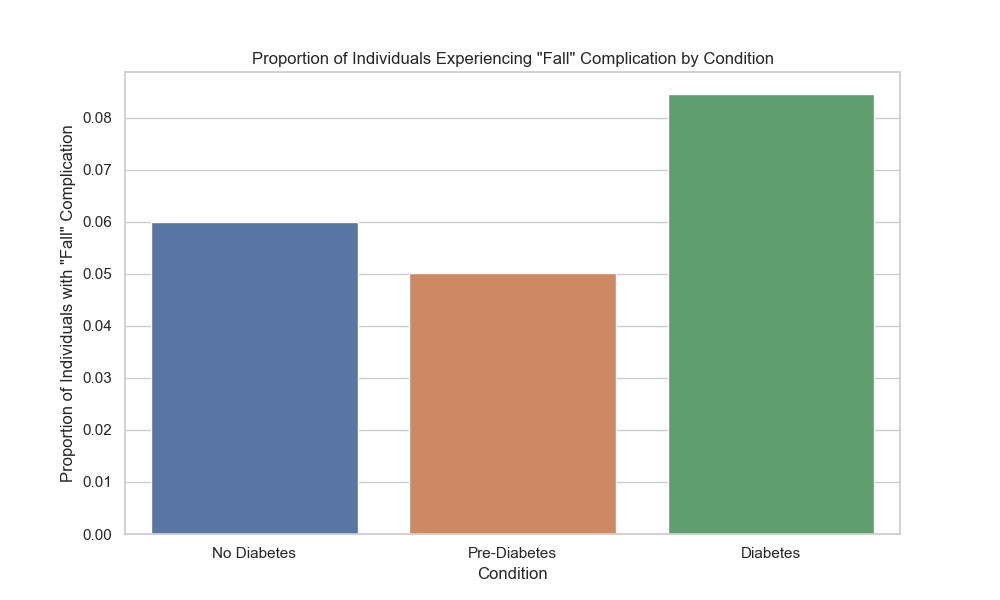
## visualize\_tukey\_results



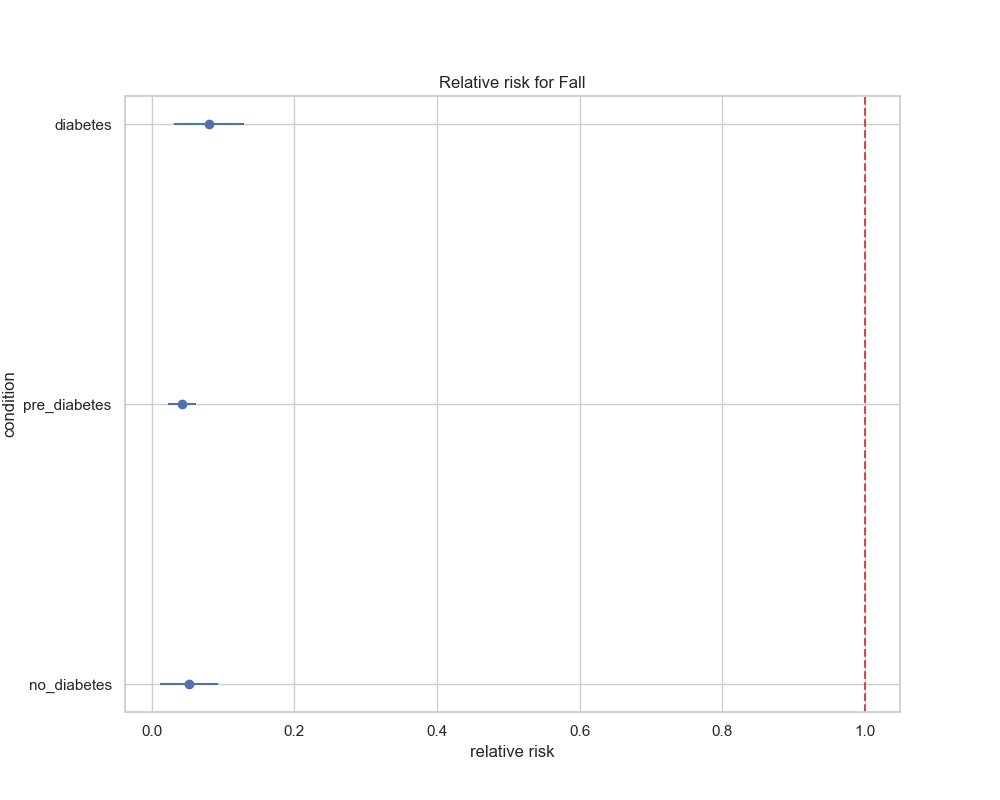
## plot\_interaction\_analysis



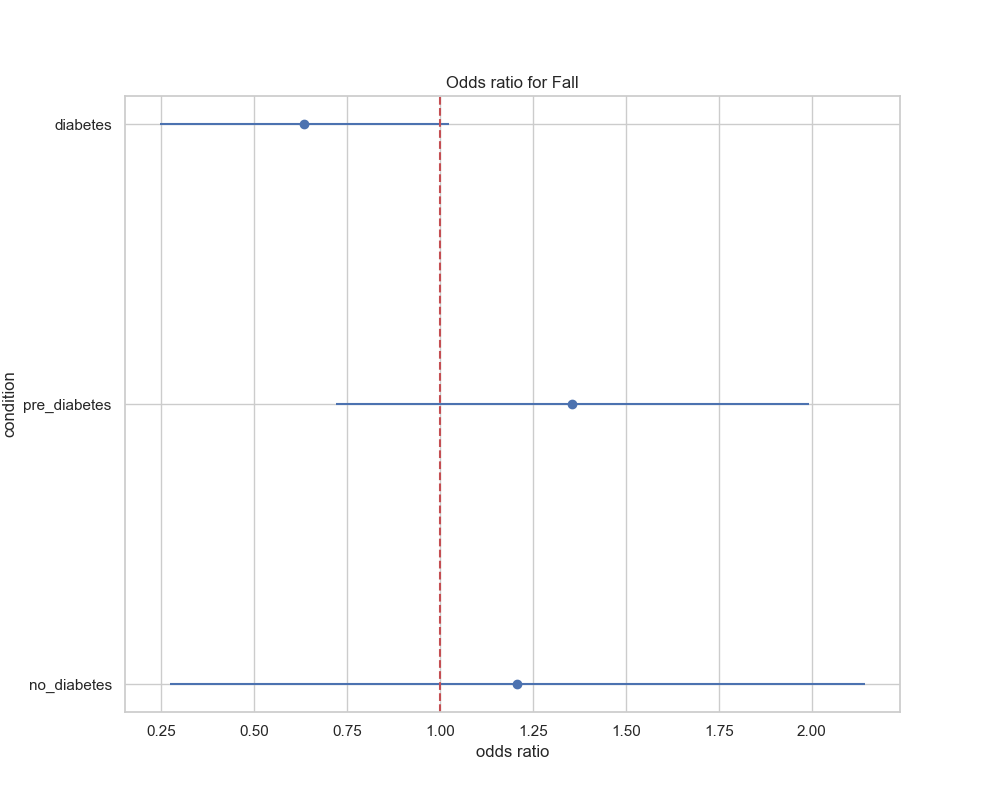
## visualize\_chi\_square\_results



## visualize\_relative\_risk\_results



## visualize\_odds\_ratio\_results



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

