

# Statistics

Andreas Gammelgaard Damsbo

5/28/2021

## Import

```
dta<-read.csv("/Volumes/Data/depression/dep_dataset.csv")
```

## Formatting

```
dta$diabetes<-factor(dta$diabetes)
dta$pad<-factor(dta$pad)
dta$civil<-factor(dta$civil)
dta$hypertension<-factor(dta$hypertension)
dta$afli<-factor(dta$afli)
dta$smoke_ever<-factor(dta$smoke_ever)
dta$ami<-factor(dta$ami)
dta$tci<-factor(dta$tci)
dta$thrombolysis<-factor(dta$thrombolysis)
dta$thrombechtomy<-factor(dta$thrombechtomy)
dta$rep_any<-factor(dta$rep_any)
dta$pad<-factor(dta$pad)
dta$nihss_0<-as.numeric(dta$nihss_0)
dta$age<-as.numeric(dta$age)
dta$rtreat<-factor(dta$rtreat)
dta$sex<-factor(dta$sex)
dta$pase_0<-as.numeric(dta$pase_0)
dta$bmi<-as.numeric(dta$bmi)
dta$mdi_6<-as.numeric(dta$mdi_6)
```

## Defining patients to include for analysis

Only including cases with complete pase\_0 and MDI at 1 & 6 months

```
dta<-dta[!is.na(dta$pase_0),]
# !is.na(dta$mdi_1)!is.na(dta$mdi_6)
```

## Defining PASE dichotomization

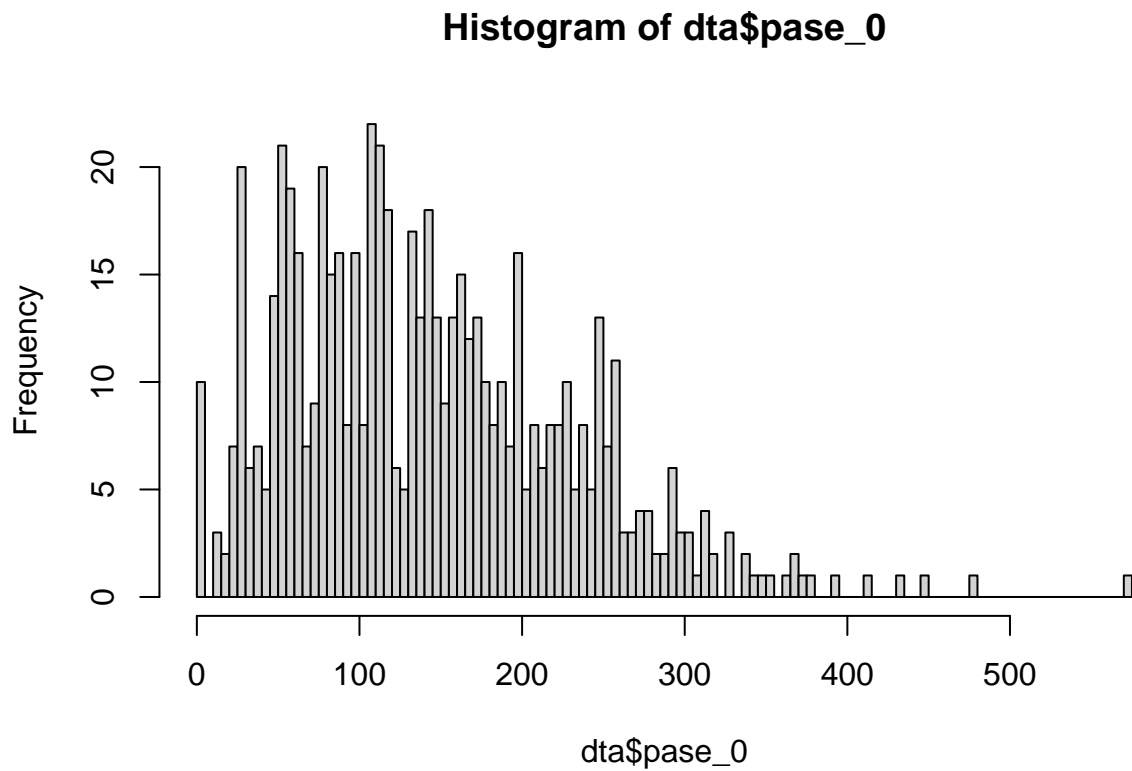
```
dta$pase_0_bin<-cut(dta$pase_0,c(min(dta$pase_0,na.rm = T),median(dta$pase_0,na.rm = T),max(dta$pase_0,
```

## Basic analyses

```
show(mdn<-median(dta$pase_0))
```

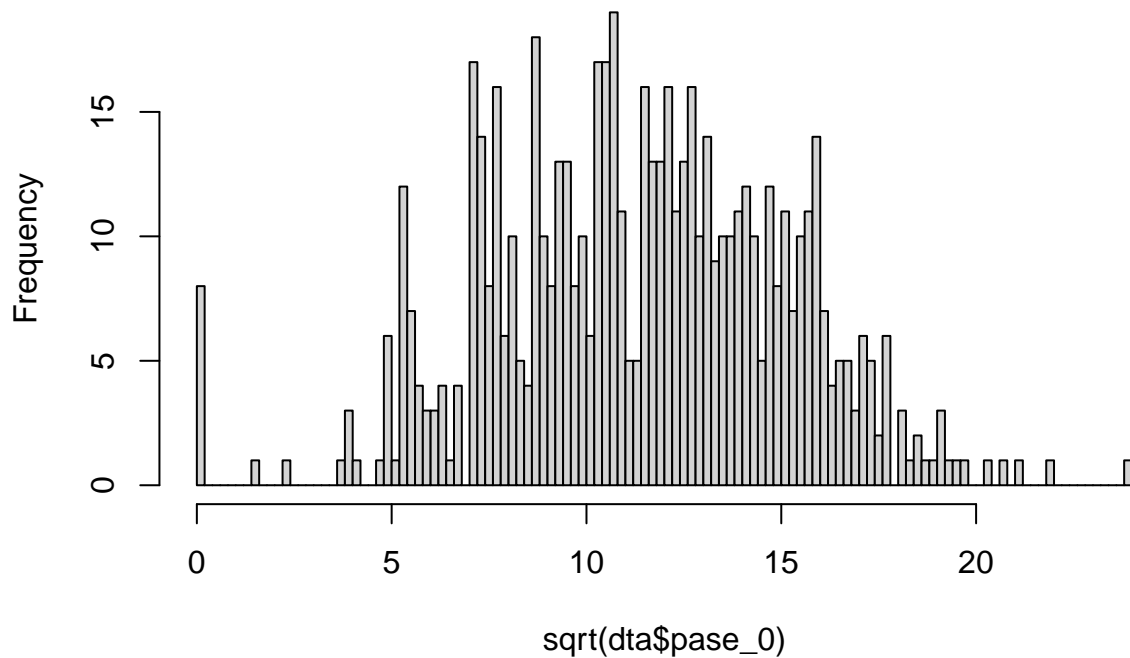
```
## [1] 132.5
```

```
hist(dta$pase_0,100)
```



```
hist(sqrt(dta$pase_0),100)
```

## Histogram of sqrt(dta\$pase\_0)



## Table One

```
library(tableone)
```

```
tbl_norm<-c("rtreat","age","sex","bmi","smoke_ever","civil","diabetes", "hypertension", "afli", "ami",  
tbl_cat<-c("rtreat","sex","diabetes", "hypertension", "smoke_ever","civil", "ami", "tci", "thrombolysis",  
tbl_non<-c("age","nihss_0")
```

```
tbl1 <- CreateTableOne(vars = tbl_norm, data = dta, factorVars = tbl_cat,includeNA = TRUE)
```

```
## Warning in ModuleReturnVarsExist(factorVars, data): The data frame does not  
## have: vasc_dis Dropped
```

```
tbl1_1<-print(tbl1, contDigits = 1, missing=F,showAllLevels=T ,nonnormal = tbl_non, smd = FALSE, quote = FALSE)
```

```
##  
##           level Overall  
## n                625  
## rtreat (%)      Active 309 (49.4)  
##                Placebo 316 (50.6)  
## age (median [IQR])          69.0 [60.0, 77.0]
```

```

## sex (%)          female  215 (34.4)
##                  male    410 (65.6)
## bmi (mean (SD))          27.1 (5.0)
## smoke_ever (%)         ever  195 (31.2)
##                       never  413 (66.1)
##                       <NA>   17 (2.7)
## civil (%)             alone  208 (33.3)
##                       partner 409 (65.4)
##                       unknown 8 (1.3)
## diabetes (%)          no    547 (87.5)
##                       yes    71 (11.4)
##                       <NA>    7 (1.1)
## hypertension (%)     no    295 (47.2)
##                       yes    325 (52.0)
##                       <NA>    5 (0.8)
## afli (%)             no    516 (82.6)
##                       unknown 7 (1.1)
##                       yes    102 (16.3)
## ami (%)              no    564 (90.2)
##                       yes    52 (8.3)
##                       <NA>    9 (1.4)
## tci (%)              no    600 (96.0)
##                       yes    16 (2.6)
##                       <NA>    9 (1.4)
## pad (%)              no    586 (93.8)
##                       yes    25 (4.0)
##                       <NA>    14 (2.2)
## nihss_0 (median [IQR]) 3.0 [2.0, 6.0]
## thrombolysis (%)      no    396 (63.4)
##                       yes    229 (36.6)
## thrombechtomy (%)     no    581 (93.0)
##                       yes    44 (7.0)
## rep_any (%)           no    388 (62.1)
##                       rep    237 (37.9)

```

```
tab2 <- CreateTableOne(vars = tbl_norm, strata="pase_0_bin",data = dta, factorVars = tbl_cat,includeNA = F)
```

```
## Warning in ModuleReturnVarsExist(factorVars, data): The data frame does not
## have: vasc_dis Dropped
```

```
tbl1_2<-print(tab2, contDigits = 1, missing=F,showAllLevels=T ,nonnormal = tbl_non, smd = F,test = T, quiet=F)
```

```

## Stratified by pase_0_bin
## level lower higher p
## n 313 312
## rtreat (%) Active 153 (48.9) 156 (50.0) 0.842
## Placebo 160 (51.1) 156 (50.0)
## age (median [IQR]) 74.0 [67.0, 80.0] 63.0 [54.0, 71.0] <0.001
## sex (%) female 133 (42.5) 82 (26.3) <0.001
## male 180 (57.5) 230 (73.7)
## bmi (mean (SD)) 26.5 (4.9) 27.7 (5.1) 0.014
## smoke_ever (%) ever 85 (27.2) 110 (35.3) 0.081
## never 220 (70.3) 193 (61.9)

```

##		<NA>	8 (2.6)	9 (2.9)	
##	civil (%)	alone	128 (40.9)	80 (25.6)	<0.001
##		partner	182 (58.1)	227 (72.8)	
##		unknown	3 (1.0)	5 (1.6)	
##	diabetes (%)	no	269 (85.9)	278 (89.1)	0.369
##		yes	41 (13.1)	30 (9.6)	
##		<NA>	3 (1.0)	4 (1.3)	
##	hypertension (%)	no	122 (39.0)	173 (55.4)	<0.001
##		yes	190 (60.7)	135 (43.3)	
##		<NA>	1 (0.3)	4 (1.3)	
##	afli (%)	no	247 (78.9)	269 (86.2)	0.035
##		unknown	3 (1.0)	4 (1.3)	
##		yes	63 (20.1)	39 (12.5)	
##	ami (%)	no	281 (89.8)	283 (90.7)	0.134
##		yes	30 (9.6)	22 (7.1)	
##		<NA>	2 (0.6)	7 (2.2)	
##	tci (%)	no	301 (96.2)	299 (95.8)	0.944
##		yes	8 (2.6)	8 (2.6)	
##		<NA>	4 (1.3)	5 (1.6)	
##	pad (%)	no	289 (92.3)	297 (95.2)	0.188
##		yes	17 (5.4)	8 (2.6)	
##		<NA>	7 (2.2)	7 (2.2)	
##	nihss_0 (median [IQR])		3.0 [2.0, 6.0]	3.0 [2.0, 5.0]	0.078
##	thrombolysis (%)	no	204 (65.2)	192 (61.5)	0.389
##		yes	109 (34.8)	120 (38.5)	
##	thrombechtomy (%)	no	287 (91.7)	294 (94.2)	0.279
##		yes	26 (8.3)	18 (5.8)	
##	rep_any (%)	no	200 (63.9)	188 (60.3)	0.392
##		rep	113 (36.1)	124 (39.7)	
##		Stratified by pase_0_bin			
##		test			
##	n				
##	rtreat (%)				
##					
##	age (median [IQR])	nonnorm			
##	sex (%)				
##					
##	bmi (mean (SD))				
##	smoke_ever (%)				
##					
##	civil (%)				
##					
##	diabetes (%)				
##					
##	hypertension (%)				
##					
##	afli (%)				
##					
##	ami (%)				

```
##
##
## tci (%)
##
## pad (%)
##
## nihss_0 (median [IQR]) nonnorm
## thrombolysis (%)
##
## thrombechtomy (%)
##
## rep_any (%)
##
```

```
write.csv(tbl1_1,"/Volumes/Data/depression/tbl1_1.csv")
write.csv(tbl1_2,"/Volumes/Data/depression/tbl1_2.csv")
```