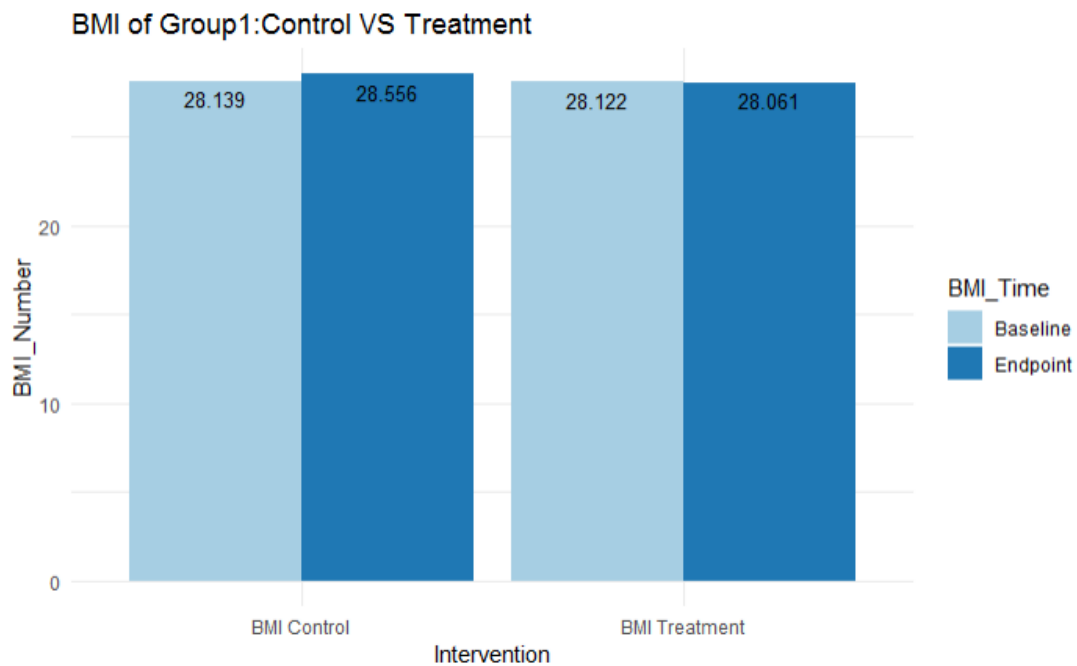


```
# BMI Comparison Between Control and Treatment Participant of Group1
```

```
library(ggplot2)
```

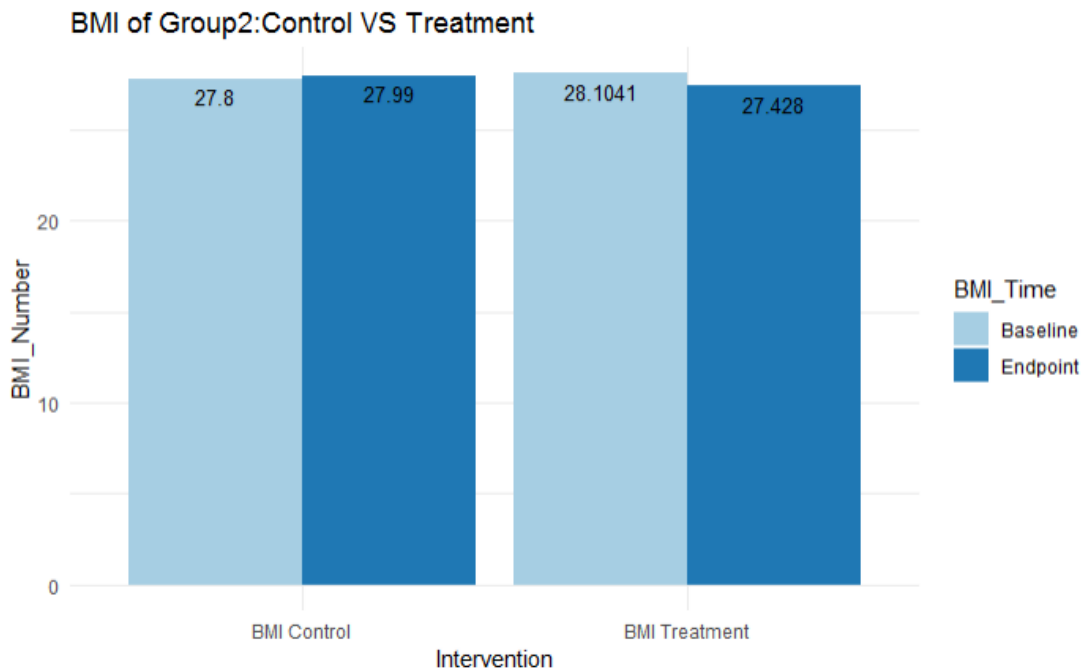
```
df <- data.frame(Intervention=rep(c("BMI Control", "BMI Treatment"), each=2),  
  BMI_Time=rep(c("Baseline", "Endpoint"),2),  
  BMI_Number=c(28.139, 28.556, 28.122, 28.061))  
head(df)
```

```
ggplot(data=df, aes(x=Intervention, y=BMI_Number, fill=BMI_Time)) +  
  geom_bar(stat="identity", position=position_dodge(),width=.9)+  
  geom_text(aes(label=BMI_Number), vjust=1.5, color="black",  
    position = position_dodge(.9), size=3.5)+  
  scale_fill_brewer(palette="Paired")+  
  theme_minimal()+  
  labs(title="BMI of Group1:Control VS Treatment")
```



```
# BMI Comparison Between Control and Treatment Participant of Group2
```

```
df <- data.frame(Intervention=rep(c("BMI Control", "BMI Treatment"), each=2),  
  BMI_Time=rep(c("Baseline", "Endpoint"),2),  
  BMI_Number=c(27.8, 27.99, 28.1041, 27.428))  
head(df)  
ggplot(data=df, aes(x=Intervention, y=BMI_Number, fill=BMI_Time)) +  
  geom_bar(stat="identity", position=position_dodge(),width=.9)+  
  geom_text(aes(label=BMI_Number), vjust=1.5, color="black",  
    position = position_dodge(.9), size=3.5)+  
  scale_fill_brewer(palette="Paired")+  
  theme_minimal()+  
  labs(title="BMI of Group2:Control VS Treatment")
```

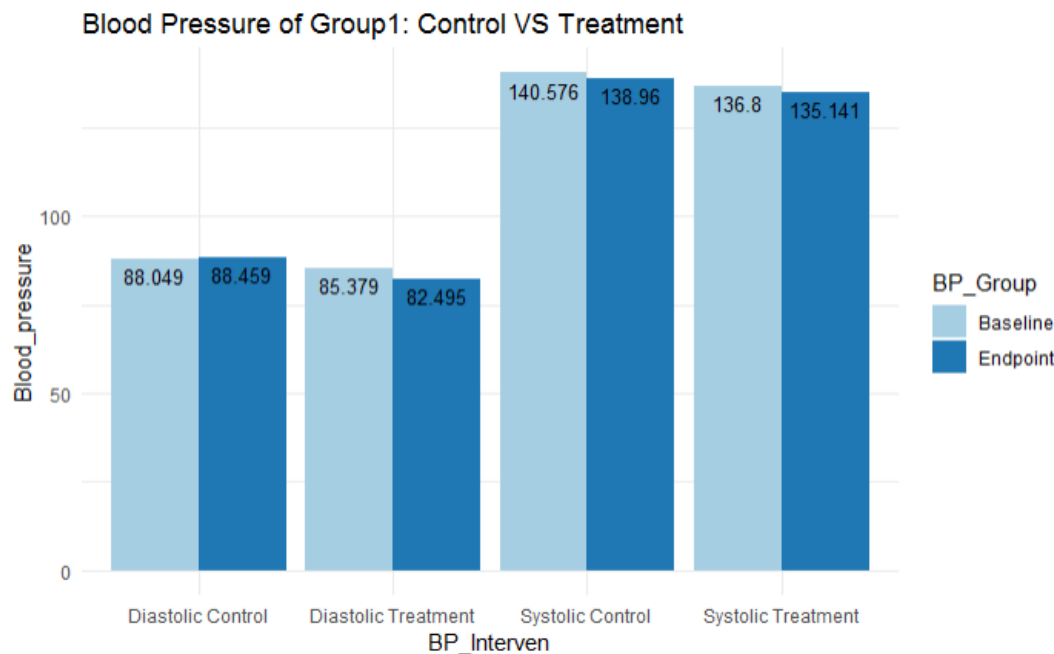


```
# Blood Pressure Comparison Between Control and Treatment Participant of Group1
```

```
df <- data.frame(BP_Interven=rep(c("Systolic Control", "Diastolic Control", "Systolic  
Treatment", "Diastolic Treatment"), each=2),  
  BP_Group=rep(c("Baseline", "Endpoint"),2),  
  Blood_pressure=c(140.576, 138.96,  
88.049,88.459,136.8,135.141,85.379,82.495))  
head(df)
```

```
ggplot(data=df, aes(x=BP_Interven, y=Blood_pressure, fill=BP_Group)) +
```

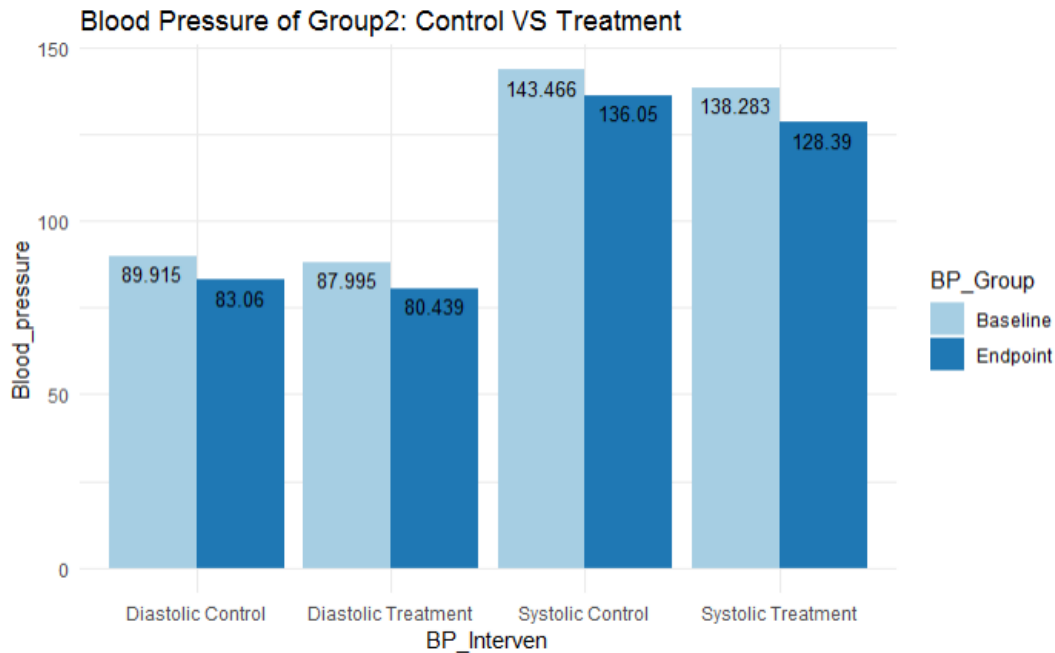
```
geom_bar(stat="identity", position=position_dodge(),width=.9)+
geom_text(aes(label=Blood_pressure), vjust=1.5, color="black",
          position = position_dodge(.9), size=3.5)+
scale_fill_brewer(palette="Paired")+
theme_minimal()+
labs(title="Blood Pressure of Group1: Control VS Treatment")
```



Blood Pressure Comparison Between Control and Treatment Participant of Group2

```
df <- data.frame(BP_Interven=rep(c("Systolic Control", "Diastolic Control", "Systolic
Treatment", "Diastolic Treatment"), each=2),
                 BP_Group=rep(c("Baseline", "Endpoint"), 2),
                 Blood_pressure=c(143.466, 136.05,
89.915, 83.06, 138.283, 128.39, 87.995, 80.439))
head(df)
```

```
ggplot(data=df, aes(x=BP_Interven, y=Blood_pressure, fill=BP_Group)) +
geom_bar(stat="identity", position=position_dodge(),width=.9)+
geom_text(aes(label=Blood_pressure), vjust=1.5, color="black",
          position = position_dodge(.9), size=3.5)+
scale_fill_brewer(palette="Paired")+
theme_minimal()+
labs(title="Blood Pressure of Group2: Control VS Treatment")
```



Piechart of Participant distribution Among CHW in Round1

```
x <- c(3, 33, 27,37,8,44,15)
```

```
CHW <- c("HZ","MA","MH","MJU","SS","SZ","None")
```

```
pct<- round(100*x/sum(x), 1)
```

```
label<-paste(CHW,pct)
```

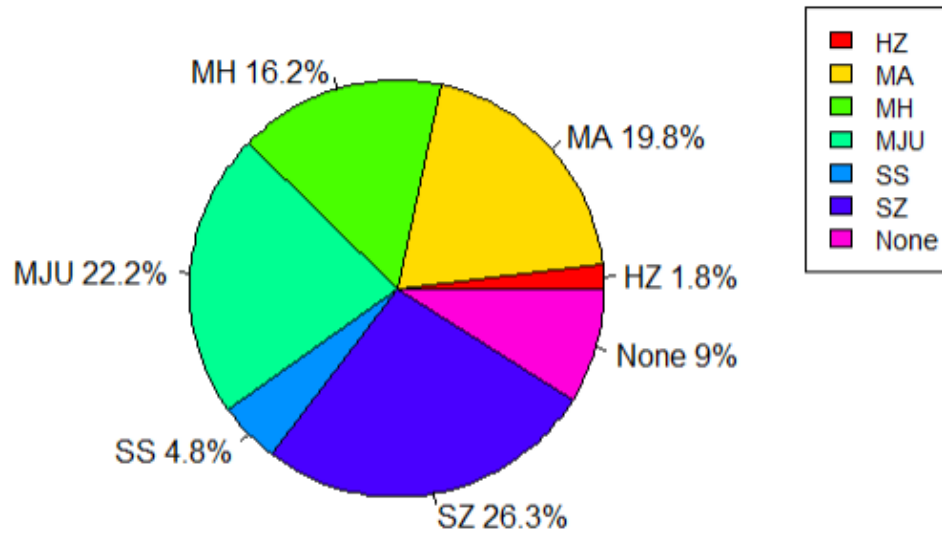
```
label<-paste(label,"%",sep="")
```

Plot the chart.

```
pie(x, labels = label, main = "Round1: Participant Distribution Among CHW",col = rainbow(length(x)))
```

```
legend("topright", c("HZ","MA","MH","MJU","SS","SZ","None"), cex = 0.9, fill = rainbow(length(x)))
```

Round1: Participant Distribution Among CHW



Piechart of Participant distribution Among CHW in Round2

```
x <- c(26, 14, 18,13,33,33)
```

```
CHW <- c("HZ","MA","MH","MJU","SS","SZ")
```

```
pct<- round(100*x/sum(x), 1)
```

```
label<-paste(CHW,pct)
```

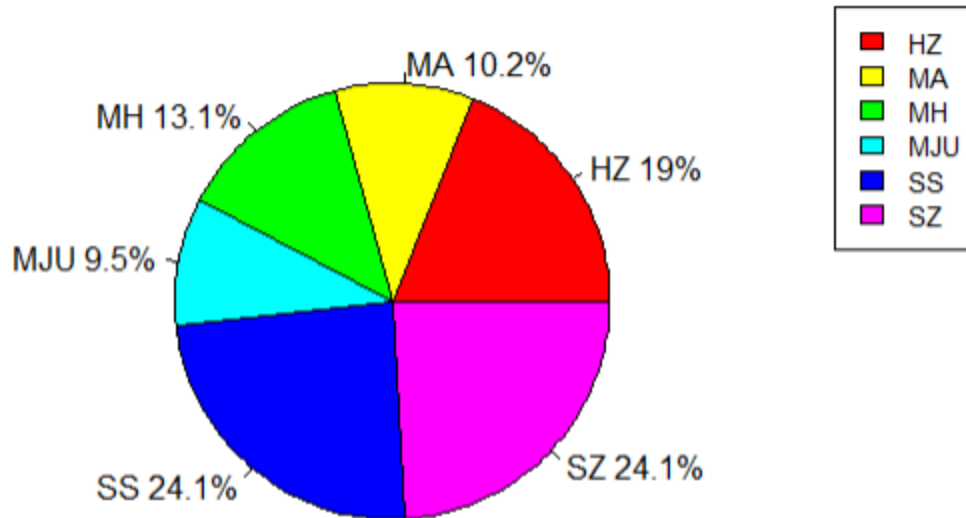
```
label<-paste(label,"%",sep="")
```

Plot the chart.

```
pie(x, labels = label, main = "Round2: Participant Distribution Among CHW",col =  
rainbow(length(x)))
```

```
legend("topright", c("HZ","MA","MH","MJU","SS","SZ"), cex = 0.9,  
fill = rainbow(length(x)))
```

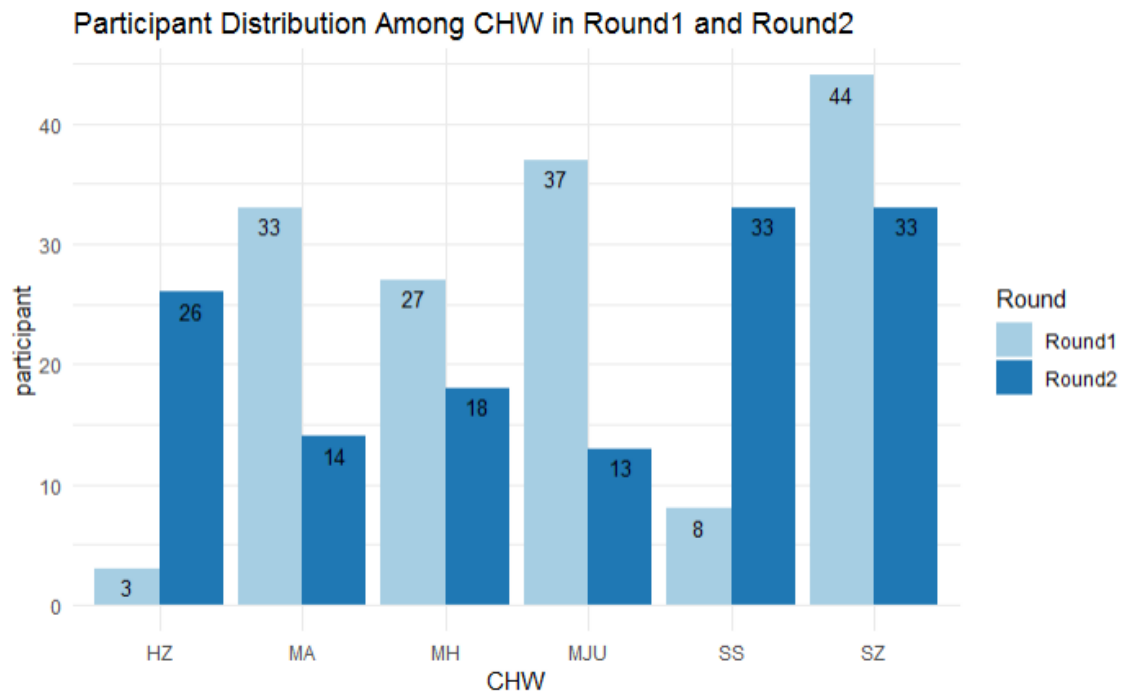
Round2: Participant Distribution Among CHW



#Participant Distribution Among CHW in Round1 and Round2

```
df <- data.frame(CHW=rep(c("HZ", "MA","MH","MJU", "SS", "SZ"), each=2),  
  Round=rep(c("Round1", "Round2"),2),  
  participant=c(3, 26, 33,14,27,18,37,13, 8 ,33, 44,33))  
head(df)
```

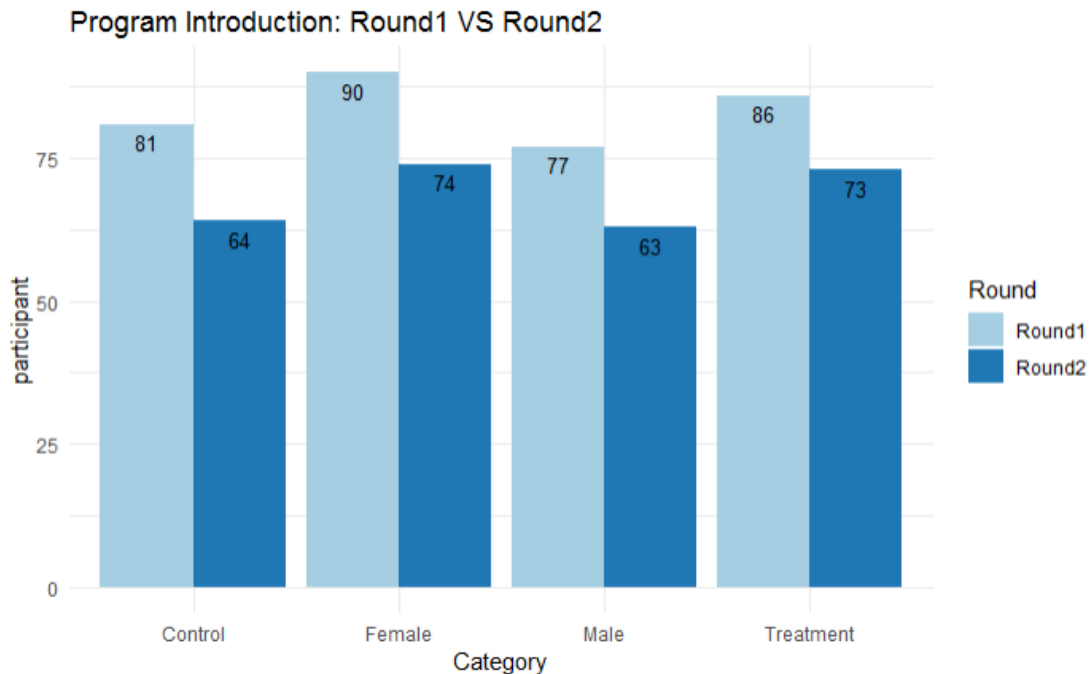
```
ggplot(data=df, aes(x=CHW, y=participant, fill=Round)) +  
  geom_bar(stat="identity", position=position_dodge(),width=.9)+  
  geom_text(aes(label=participant), vjust=1.5, color="black",  
    position = position_dodge(.9), size=3.5)+  
  scale_fill_brewer(palette="Paired")+  
  theme_minimal()+  
  labs(title="Participant Distribution Among CHW in Round1 and Round2")
```



#Program Introduction: Round1 VS Round2

```
df <- data.frame(Category=rep(c("Control", "Treatment", "Male", "Female"), each=2),
  Round=rep(c("Round1", "Round2"), 2),
  participant=c(81, 64, 86, 73, 77, 63, 90, 74))
head(df)
```

```
ggplot(data=df, aes(x=Category, y=participant, fill=Round)) +
  geom_bar(stat="identity", position=position_dodge(), width=.9) +
  geom_text(aes(label=participant), vjust=1.5, color="black",
    position = position_dodge(.9), size=3.5) +
  scale_fill_brewer(palette="Paired") +
  theme_minimal() +
  labs(title="Program Introduction: Round1 VS Round2")
```



Survey Question Comparison between Control and Treatment Participant

#In general how would you rate your Physical Health?

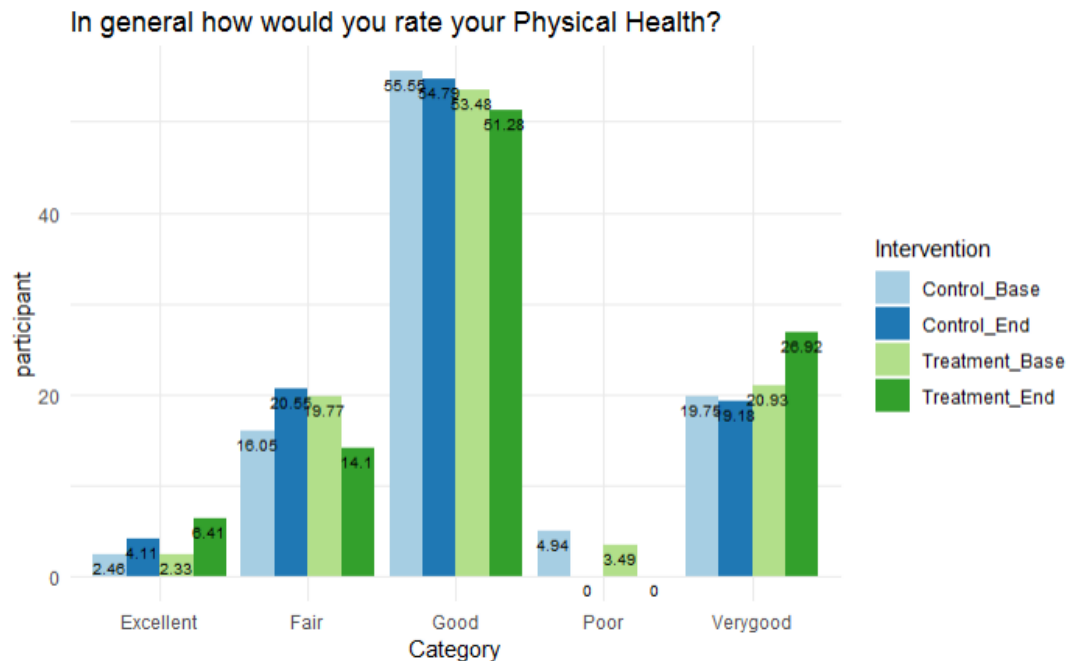
```
df <- data.frame(Category=rep(c("Excellent", "Verygood", "Good", "Fair", "Poor"),
each=4),

Intervention=rep(c("Control_Base", "Control_End", "Treatment_Base", "Treatment_End"),
5),

participant=c(2.46, 4.11, 2.33, 6.41,
19.75, 19.18, 20.93, 26.92, 55.55,
54.79, 53.48, 51.28, 16.05, 20.55,
19.77, 14.10, 4.94, 0, 3.49, 0))

head(df)

ggplot(data=df, aes(x=Category, y=participant, fill=Intervention)) +
  geom_bar(stat="identity", position=position_dodge(), width=.9) +
  geom_text(aes(label=participant), vjust=1.5, color="black",
    position = position_dodge(.9), size=2.6) +
  scale_fill_brewer(palette="Paired") +
  theme_minimal() +
  labs(title="In general how would you rate your Physical Health?")
```

#Do you ever take your own blood pressure?

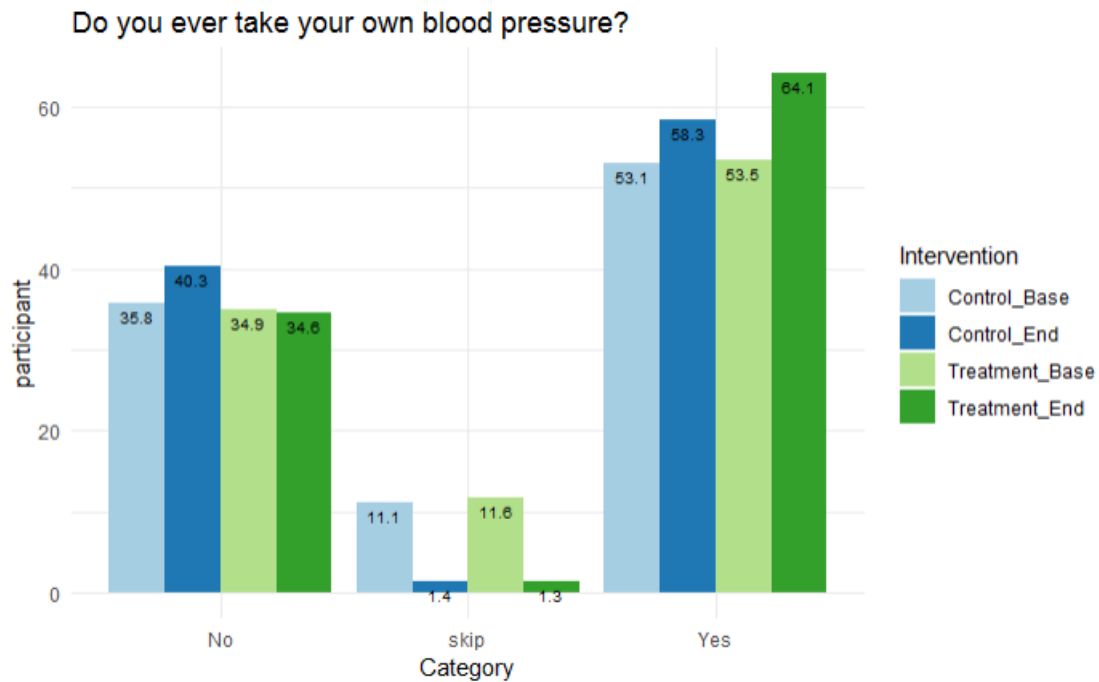
```
df <- data.frame(Category=rep(c("No", "skip", "Yes"), each=4),
```

```
Intervention=rep(c("Control_Base", "Control_End", "Treatment_Base", "Treatment_End"),
3),
```

```
participant=c(35.8, 40.3, 34.9, 34.6, 11.1, 1.4, 11.6, 1.3, 53.1, 58.3, 53.5,
64.1))
```

```
head(df)
```

```
ggplot(data=df, aes(x=Category, y=participant, fill=Intervention)) +
  geom_bar(stat="identity", position=position_dodge(), width=.9) +
  geom_text(aes(label=participant), vjust=1.5, color="black",
            position = position_dodge(.9), size=2.6) +
  scale_fill_brewer(palette="Paired") +
  theme_minimal() +
  labs(title="Do you ever take your own blood pressure?")
```



#In general would you say your Health is?

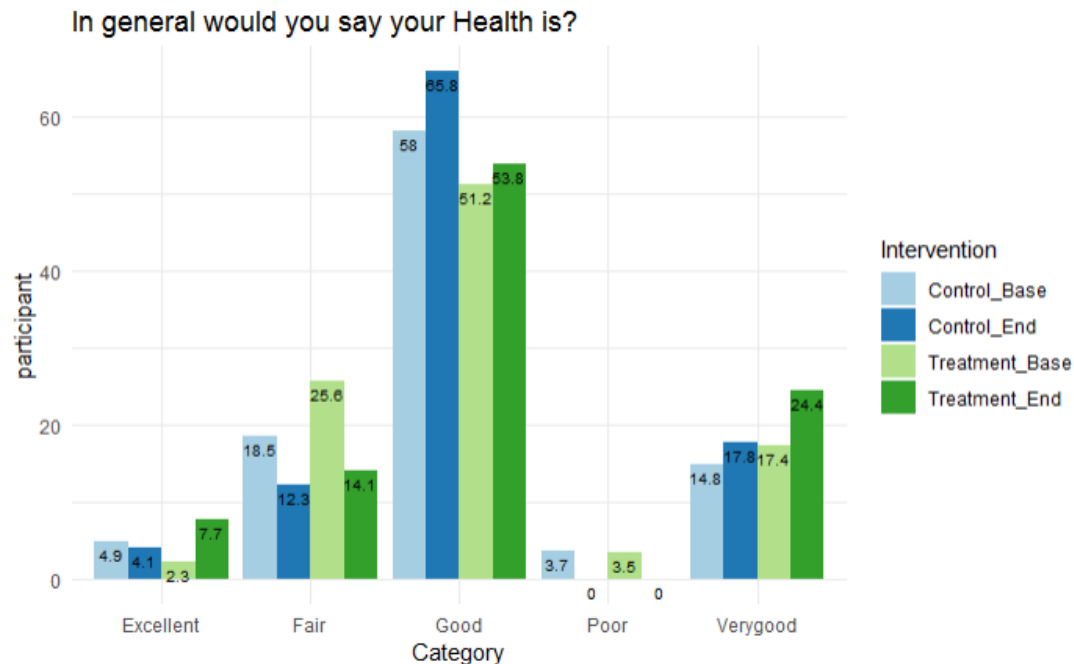
```
df <- data.frame(Category=rep(c("Excellent", "Fair", "Good", "Poor", "Verygood"),
each=4),
```

```
Intervention=rep(c("Control_Base", "Control_End", "Treatment_Base", "Treatment_End"),
5),
```

```
participant=c(4.9, 4.1, 2.3, 7.7, 18.5, 12.3, 25.6, 14.1, 58.0, 65.8,
51.2, 53.8, 3.7, 0.0, 3.5, 0.0, 14.8, 17.8, 17.4, 24.4))
```

```
head(df)
```

```
ggplot(data=df, aes(x=Category, y=participant, fill=Intervention)) +
  geom_bar(stat="identity", position=position_dodge(), width=.9) +
  geom_text(aes(label=participant), vjust=1.5, color="black",
            position = position_dodge(.9), size=2.6) +
  scale_fill_brewer(palette="Paired") +
  theme_minimal() +
  labs(title="In general would you say your Health is?")
```



#How well are you managing your high blood pressure?

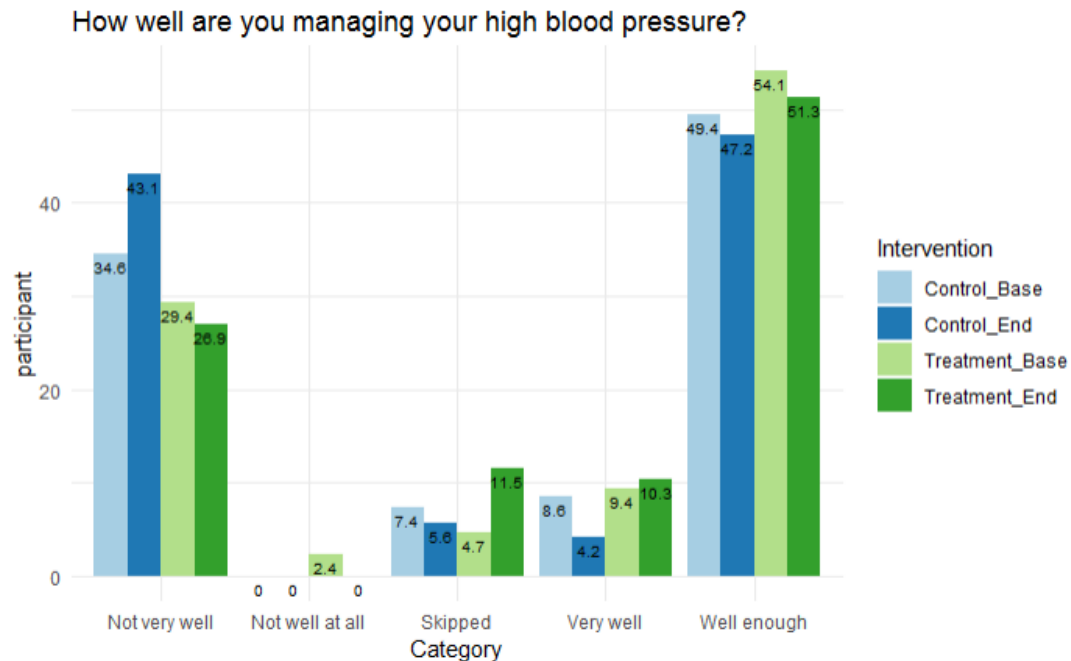
```
df <- data.frame(Category=rep(c("Not very well", "Not well at all", "Skipped", "Very well", "Well enough"), each=4),
```

```
Intervention=rep(c("Control_Base", "Control_End", "Treatment_Base", "Treatment_End"), 5),
```

```
    participant=c(34.6, 43.1, 29.4, 26.9, 0.0, 0.0, 2.4, 0.0, 7.4, 5.6, 4.7, 11.5, 8.6, 4.2, 9.4, 10.3, 49.4, 47.2, 54.1, 51.3))
```

```
head(df)
```

```
ggplot(data=df, aes(x=Category, y=participant, fill=Intervention)) +
  geom_bar(stat="identity", position=position_dodge(), width=.9) +
  geom_text(aes(label=participant), vjust=1.5, color="black",
    position = position_dodge(.9), size=2.6) +
  scale_fill_brewer(palette="Paired") +
  theme_minimal() +
  labs(title="How well are you managing your high blood pressure?")
```



#To what extent are you able carry out your everyday physical activity?

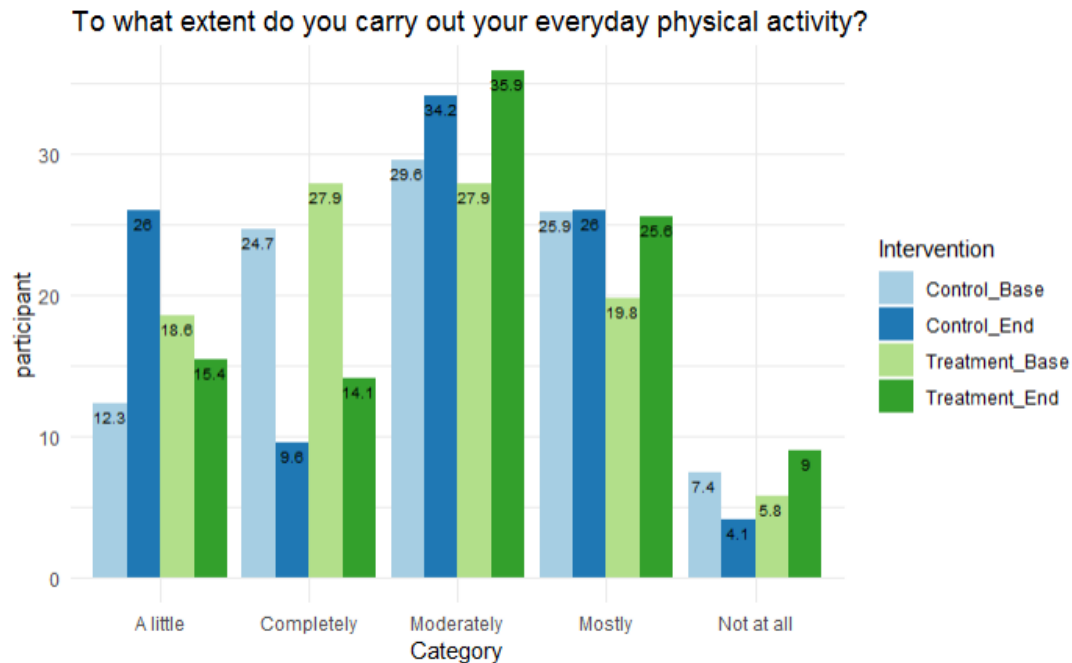
```
df <- data.frame(Category=rep(c("A little", "Completely", "Moderately", "Mostly", "Not
at all"), each=4),
```

```
Intervention=rep(c("Control_Base", "Control_End", "Treatment_Base", "Treatment_End"),
5),
```

```
    participant=c(12.3, 26.0, 18.6, 15.4, 24.7, 9.6, 27.9, 14.1, 29.6,
34.2, 27.9, 35.9, 25.9, 26.0, 19.8, 25.6, 7.4, 4.1, 5.8,
9.0))
```

```
head(df)
```

```
ggplot(data=df, aes(x=Category, y=participant, fill=Intervention)) +
  geom_bar(stat="identity", position=position_dodge(), width=.9) +
  geom_text(aes(label=participant), vjust=1.5, color="black",
    position = position_dodge(.9), size=2.6) +
  scale_fill_brewer(palette="Paired") +
  theme_minimal() +
  labs(title="To what extent do you carry out your everyday physical activity?")
```



#How much time do you usually spend doing moderate physical activity?

```
df <- data.frame(Category=rep(c("Total participant", "0-30mins", "31-60mins", "61-120mins", "121-300mins"), each=4),
```

```
Intervention=rep(c("Control_Base", "Control_End", "Treatment_Base", "Treatment_End"), 5),
```

```
participant=c(50, 36, 47, 59, 41, 27, 37, 53, 7, 9, 7, 6, 2, 0, 1, 0, 0, 0, 2, 0))
head(df)
```

```
ggplot(data=df, aes(x=Category, y=participant, fill=Intervention)) +
  geom_bar(stat="identity", position=position_dodge(), width=.9) +
  geom_text(aes(label=participant), vjust=1.5, color="black",
    position = position_dodge(.9), size=2.6) +
  scale_fill_brewer(palette="Paired") +
  theme_minimal() +
  labs(title="How much time do you usually spend doing moderate physical activity?")
```

How much time do you usually spend doing moderate physical activity?

