

Assessing capacity of health centres in Siem Reap, Cambodia

Rmarkdown Class Project

Load packages

Load dataset

```
Capacity_survey_dataset <- read_dta("~/Documents/nBox/WHO Cambodia/Task 2 (Survey & Interviews)/Step B/
```

View dataset

```
view(Capacity_survey_dataset)
```

Data cleaning

```
#Add value labels to the `OD name` variable
Capacity_survey_dataset$ODname <-
  factor(Capacity_survey_dataset$ODname,
    levels= c(1,2,3,4),
    labels= c("Krolanh", "Siem Reap", "SotrNikum", "Angkorchum"))
```

Data analysis

```
#What percent of HCs belong to each of the four operational districts (ODs)?
Capacity_survey_dataset %>%
  group_by(ODname) %>%
  summarize(n = n()) %>%
  mutate(freq = n/sum(n))
```

```
## # A tibble: 4 x 3
##   ODname      n freq
##   <fct>    <int> <dbl>
## 1 Krolanh      8 0.178
## 2 Siem Reap   14 0.311
## 3 SotrNikum   13 0.289
## 4 Angkorchum  10 0.222
```

```
#What is the average distance (in kms) from a HC to a referral hospital
Capacity_survey_dataset["Q18c"][Capacity_survey_dataset["Q18c"] == "0"] <- "0"
Capacity_survey_dataset$Q18c <- as.numeric(Capacity_survey_dataset$Q18c)
mean(Capacity_survey_dataset$Q18c)
```

```
## [1] 24.54444
```

```
#What is the average setting type of each HC?
Capacity_survey_dataset %>%
  group_by(Settingtype) %>%
  summarize(n = n()) %>%
  mutate(freq = n/sum(n))
```

```
## # A tibble: 3 x 3
##   Settingtype      n   freq
##   <dbl+lbl>    <int> <dbl>
## 1 1 [Rural]      38 0.844
## 2 2 [Urban]       2 0.0444
## 3 3 [Semi-urban]  5 0.111
```

```
#What proportion of HCs had been trained in the WHO PEN?
Capacity_survey_dataset %>%
  group_by(WHOtraining) %>%
  summarize(n = n()) %>%
  mutate(freq = n/sum(n))
```

```
## # A tibble: 2 x 3
##   WHOtraining      n   freq
##   <dbl+lbl>    <int> <dbl>
## 1 0 [No]       30 0.667
## 2 1 [Yes]      15 0.333
```

```
#Calculate average number of NCD-related visits per day by OD and setting type
Capacity_survey_dataset$NCDvisits <- Capacity_survey_dataset$Q16a + Capacity_survey_dataset$Q16b + Capa

Capacity_survey_dataset %>%
  group_by(ODname, Settingtype) %>%
  summarize(mean_NCD_visits = mean(NCDvisits))
```

```
## 'summarise()' has grouped output by 'ODname'. You can override using the
## '.groups' argument.
```

```
## # A tibble: 9 x 3
## # Groups:   ODname [4]
##   ODname      Settingtype   mean_NCD_visits
##   <fct>      <dbl+lbl>         <dbl>
## 1 Krolanh    1 [Rural]           0.714
## 2 Krolanh    3 [Semi-urban]       0
## 3 Siem Reap  1 [Rural]           2.64
## 4 Siem Reap  2 [Urban]            12
## 5 Siem Reap  3 [Semi-urban]       2
```

$$ODname)) + 1;$$
$$= \text{ODname})) + \dots$$

NCD visits by operational district

