

```
In [37]: import pandas as pd
import matplotlib.pyplot as plt
from matplotlib.backends.backend_pdf import PdfPages
```

```
In [3]: df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")
```

```
In [4]: df.head()
```

Out[4]:

	ID	Sex	Age	Marital Status	Ethnic Group	Religion	Educational Level	Witnessed Violence	Type of Violence witnessed	Co-Offender Relationship
0	1001	Female	31-45	Single	Ewe	Christian	Tertiary	Yes	Emotional Abuse	Partner
1	1002	Male	31-45	Married	Akan	Christian	Tertiary	Yes	Verbal Abuse	Partner
2	1003	Male	31-45	Single	Akan	Christian	Tertiary	Yes	Verbal Abuse, Physical Abuse	Partner
3	1004	Male	18-30	Single	Ewe	Christian	Tertiary	Yes	Physical Abuse	Partner
4	1005	Female	31-45	Single	Akan	Christian	Tertiary	No	NaN	Partner

5 rows x 27 columns

```
In [5]: df.shape
```

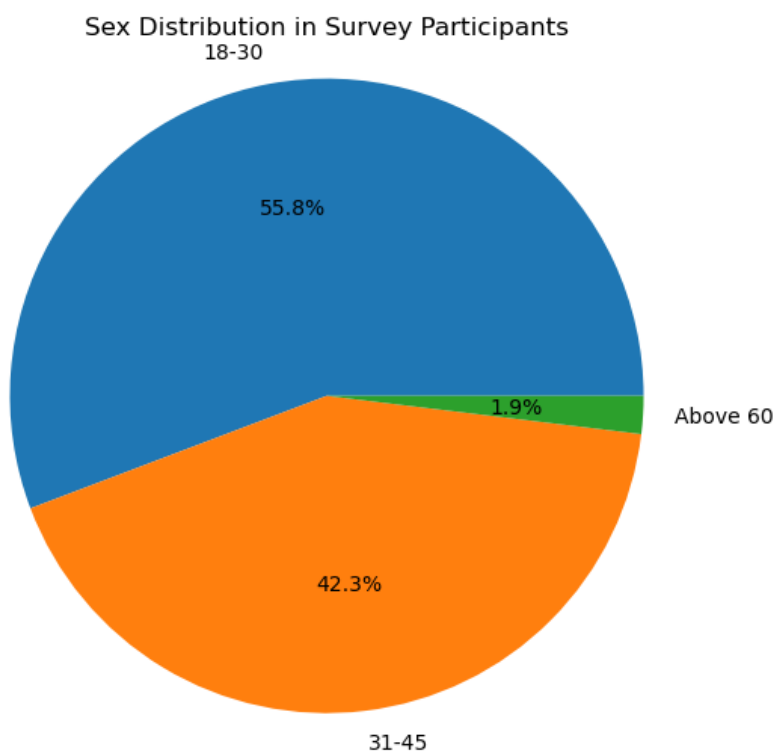
Out[5]: (52, 27)

```
In [6]: df["Sex"].value_counts()
```

```
Out[6]: Male      33
        Female    19
        Name: Sex, dtype: int64
```

```
In [7]: age_count = df["Age"].value_counts()

plt.figure(figsize=(10, 6))
plt.pie(age_count, labels=age_count.index, autopct='%1.1f%%')
plt.title('Sex Distribution in Survey Participants')
plt.axis('equal')
plt.savefig('plot1.jpg', dpi=300)
plt.show()
age_count
```



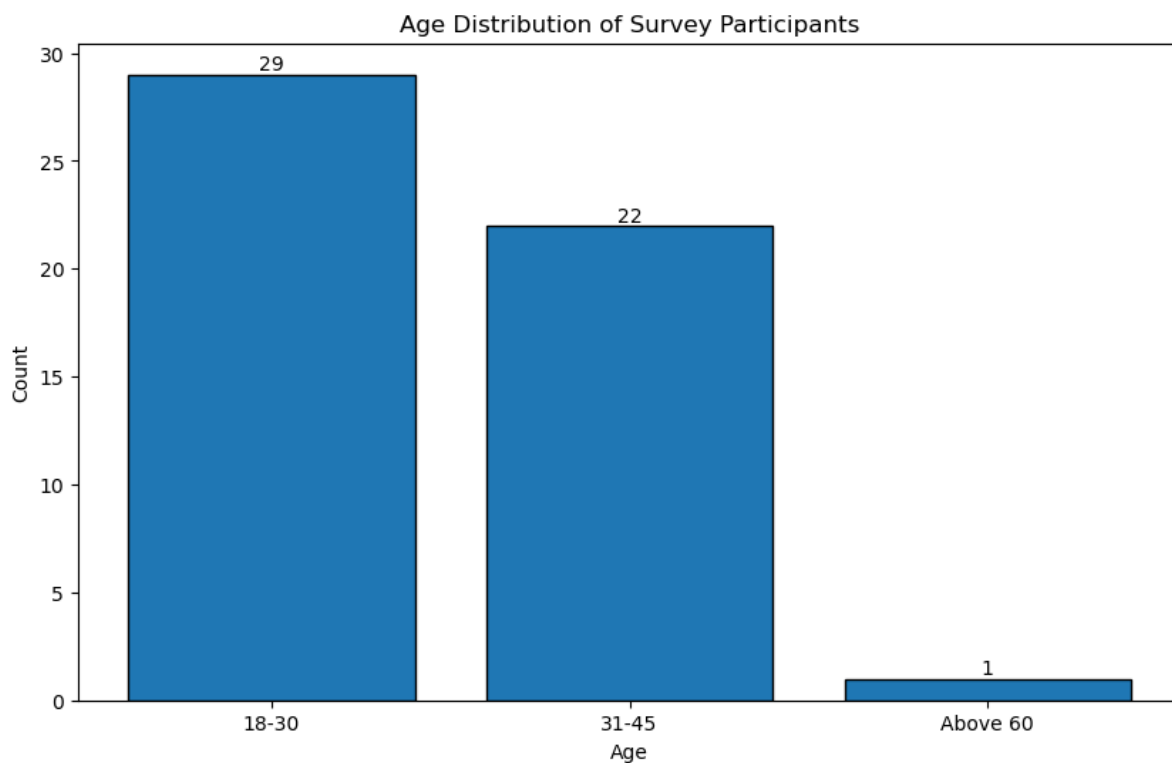
```
Out[7]: 18-30      29
        31-45     22
        Above 60    1
        Name: Age, dtype: int64
```

```
In [8]: age_data = df['Age']
age_counts = age_data.value_counts().sort_index()

plt.figure(figsize=(10, 6))
plt.bar(age_counts.index, age_counts.values, edgecolor='black')

# Adding count values on top of each bar
for i, count in enumerate(age_counts.values):
    plt.text(age_counts.index[i], count, str(count), ha='center', va='bottom')

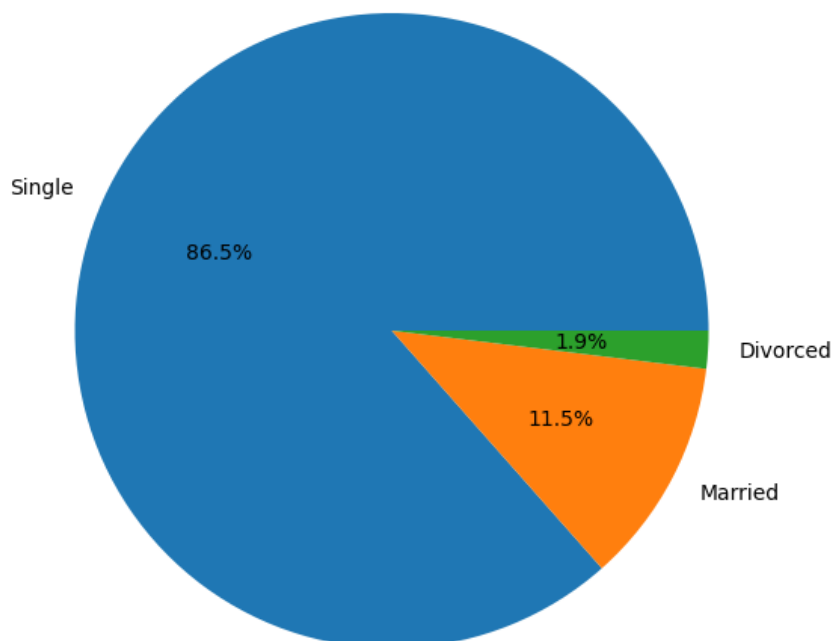
plt.xlabel('Age')
plt.ylabel('Count')
plt.title('Age Distribution of Survey Participants')
plt.xticks()
plt.savefig('plot2.png', dpi=300)
plt.show()
```



```
In [9]: marital_count = df["Marital Status"].value_counts()

plt.figure(figsize=(10, 6))
plt.pie(marital_count, labels=marital_count.index, autopct='%1.1f%%')
plt.title('Marital Status Distribution in Survey Participants')
plt.axis('equal')
plt.savefig('plot3.png', dpi=300)
plt.show()
```

Marital Status Distribution in Survey Participants

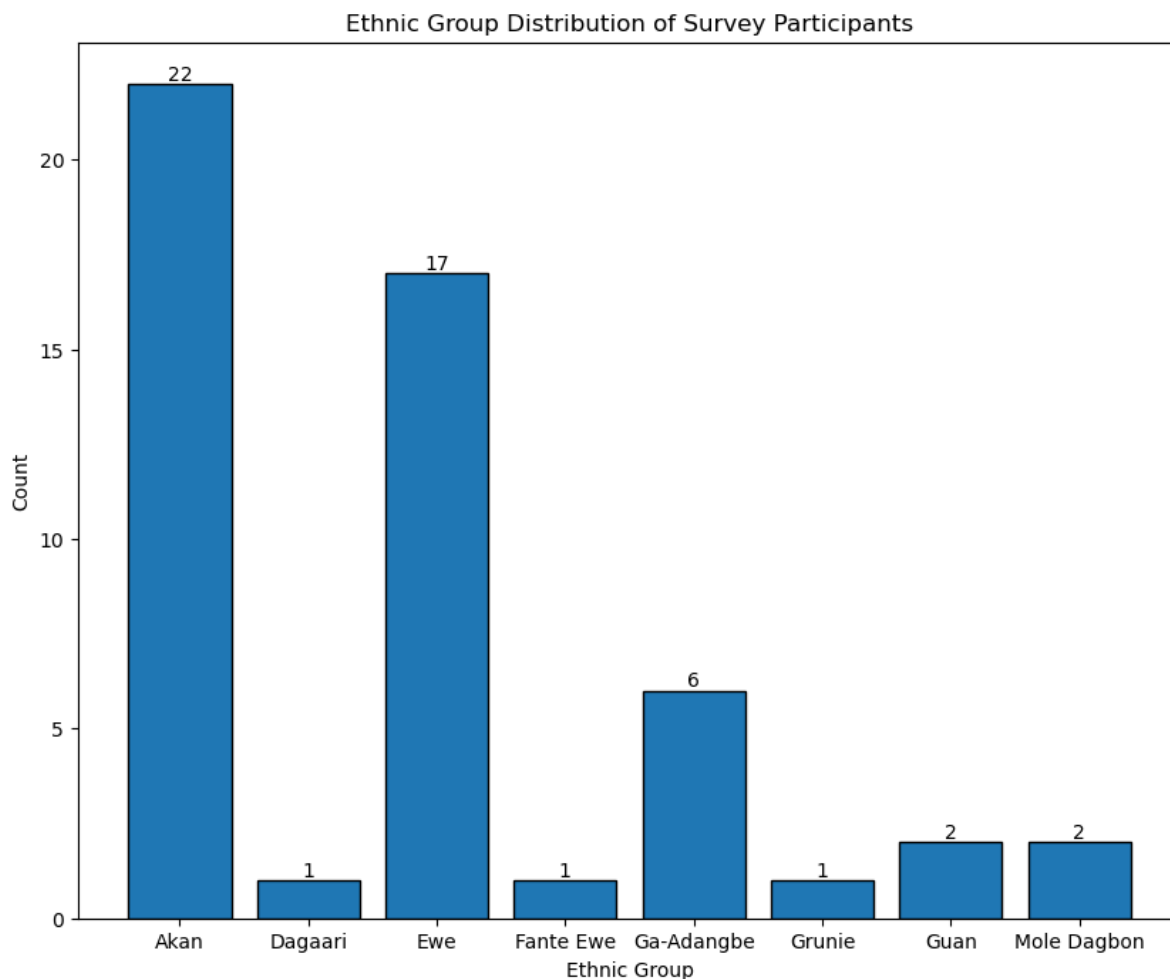


```
In [10]: ethnic_data = df['Ethnic Group']
ethnic_counts = ethnic_data.value_counts().sort_index()

plt.figure(figsize=(10, 8))
plt.bar(ethnic_counts.index, ethnic_counts.values, edgecolor='black')
```

```
# Adding count values on top of each bar
for i, count in enumerate(ethnic_counts.values):
    plt.text(ethnic_counts.index[i], count, str(count), ha='center', va='bottom')

plt.xlabel('Ethnic Group')
plt.ylabel('Count')
plt.title('Ethnic Group Distribution of Survey Participants')
plt.xticks()
plt.savefig('plot4.png', dpi=300)
plt.show()
```

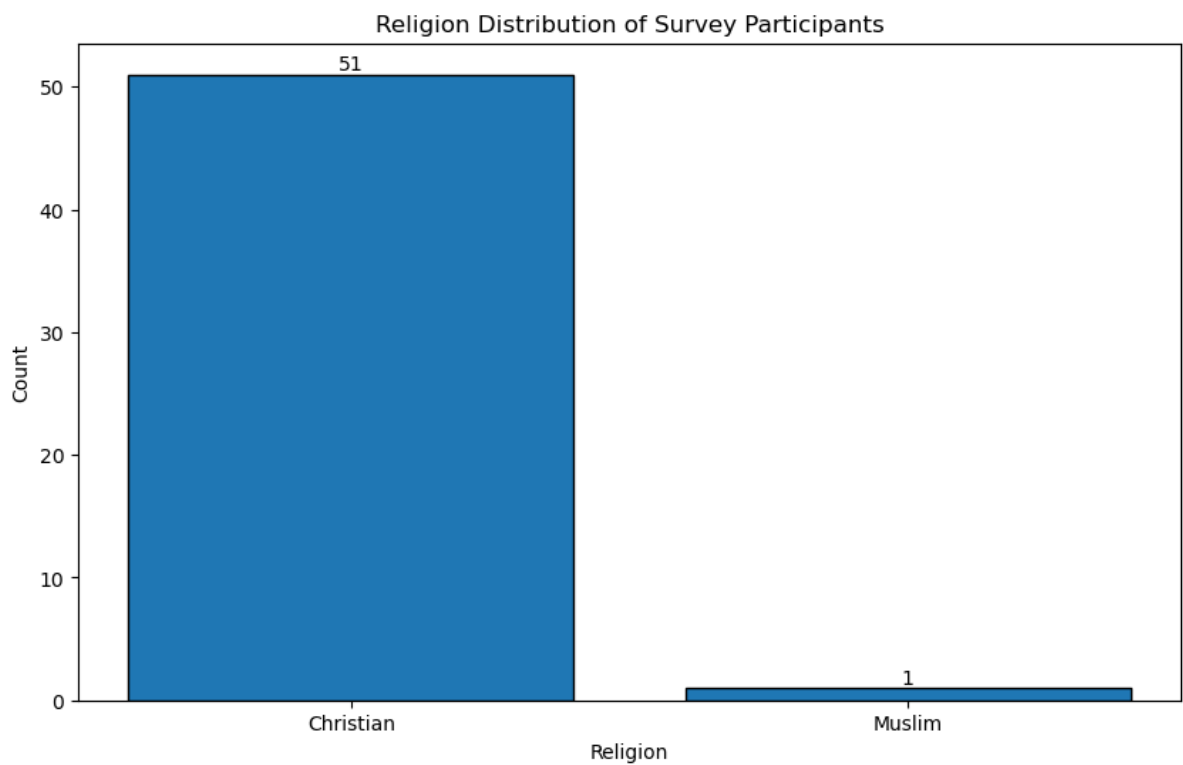


```
In [11]: religion_data = df['Religion']
religion_counts = religion_data.value_counts()

plt.figure(figsize=(10, 6))
plt.bar(religion_counts.index, religion_counts.values, edgecolor='black')

# Adding count values on top of each bar
for i, count in enumerate(religion_counts.values):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.xlabel('Religion')
plt.ylabel('Count')
plt.title('Religion Distribution of Survey Participants')
plt.xticks()
plt.savefig('plot5.png', dpi=300)
plt.show()
```

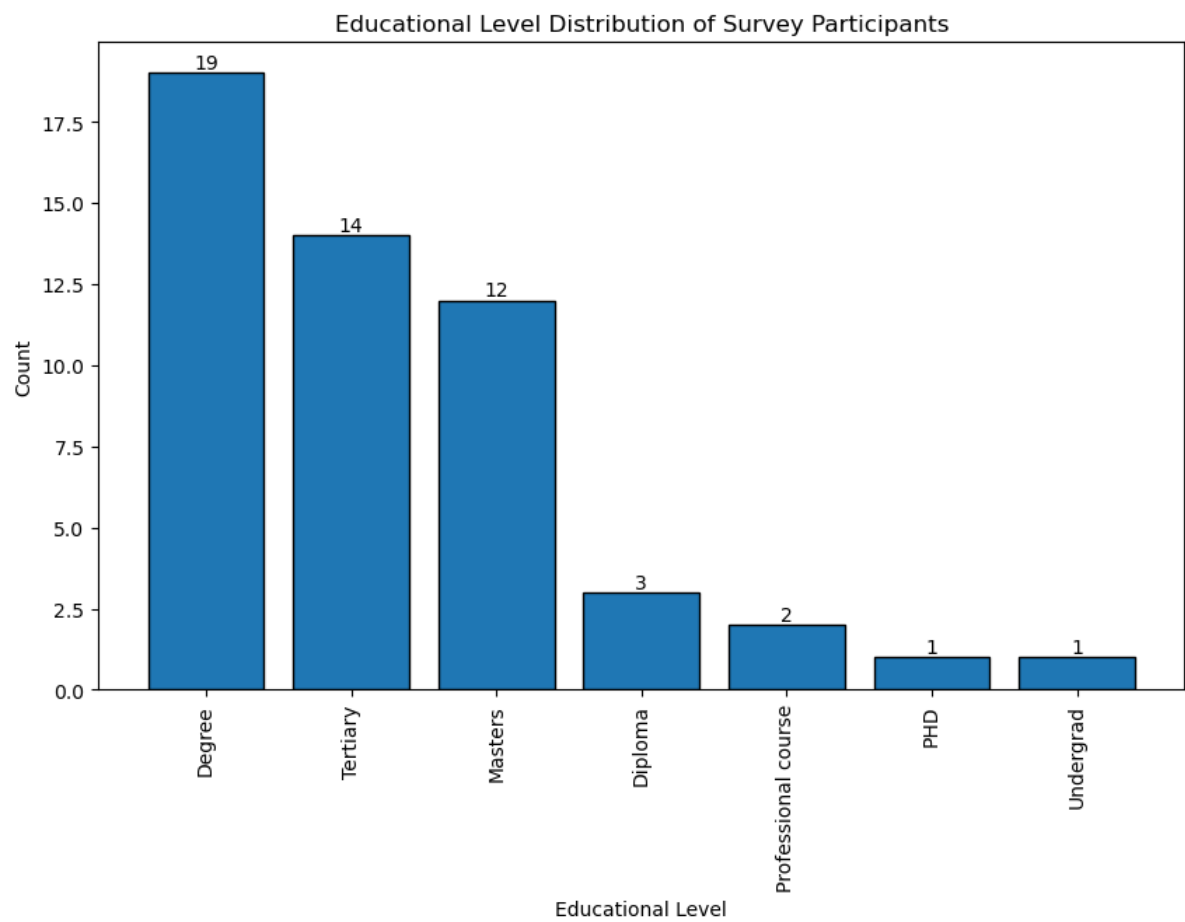


```
In [12]: education_data = df['Educational Level']
education_counts = education_data.value_counts()

plt.figure(figsize=(10, 6))
plt.bar(education_counts.index, education_counts.values, edgecolor='black')

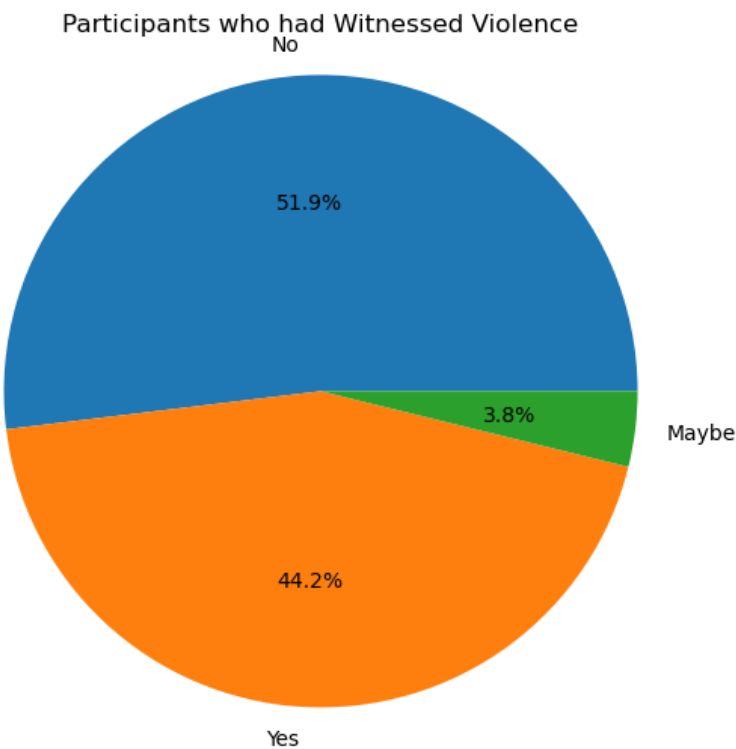
# Adding count values on top of each bar
for i, count in enumerate(education_counts.values):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.xlabel('Educational Level')
plt.ylabel('Count')
plt.title('Educational Level Distribution of Survey Participants')
plt.xticks(rotation=90)
plt.savefig('plot6.png', dpi=300)
plt.show()
```



```
In [13]: witnessed_violence_data = df['Witnessed Violence']
witnessed_violence_counts = witnessed_violence_data.value_counts()

plt.figure(figsize=(10, 6))
plt.pie(witnessed_violence_counts, labels=witnessed_violence_counts.index, autopct='%1.1f%%')
plt.title('Participants who had Witnessed Violence')
plt.axis('equal')
plt.savefig('plot7.png', dpi=300)
plt.show()
```



```
In [14]: witnessed_violence = df['Type of Violence witnessed'].str.split(",", expand=
witnessed_violence_counts = witnessed_violence.stack().value_counts()

# Merge duplicate categories
witnessed_violence_counts['Physical Abuse'] += witnessed_violence_counts.pop

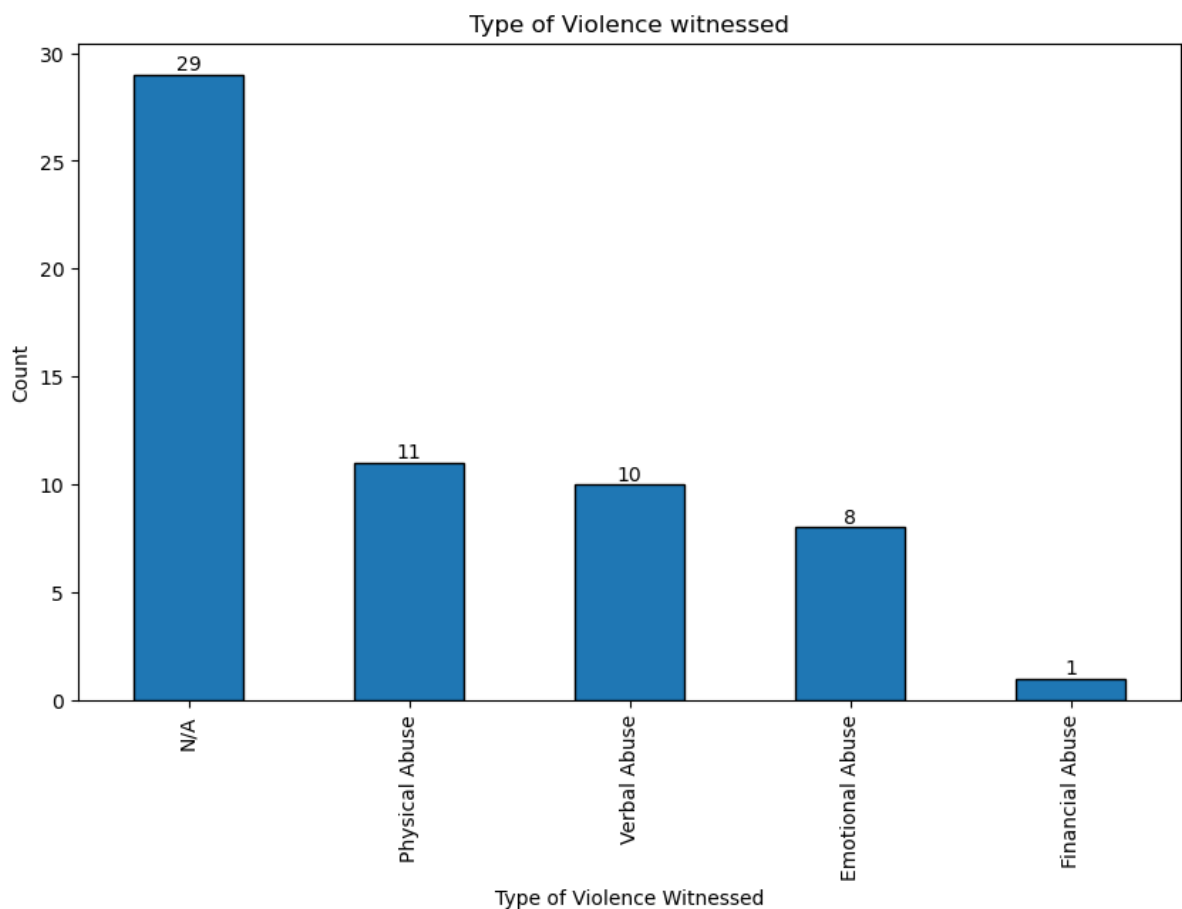
# Include N/A category in the counts
n_a_count = len(df[df['Type of Violence witnessed'].isna()])
witnessed_violence_counts['N/A'] = n_a_count

# Sort the counts in descending order
witnessed_violence_counts = witnessed_violence_counts.sort_values(ascending=

# Plot the bar graph
plt.figure(figsize=(10, 6))
witnessed_violence_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Type of Violence Witnessed')
plt.ylabel('Count')
plt.title('Type of Violence witnessed')
plt.xticks(rotation=90)

# Add value counts at the top of each bar
for i, count in enumerate(witnessed_violence_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot8.png', dpi=300)
plt.show()
```



```
In [15]: response_data = df['Community & Law Enforcement Response to Male GBV']

# Split the responses and stack them into a single column
responses = response_data.str.split(",", expand=True).stack()

# Count the occurrences of each response
```

```

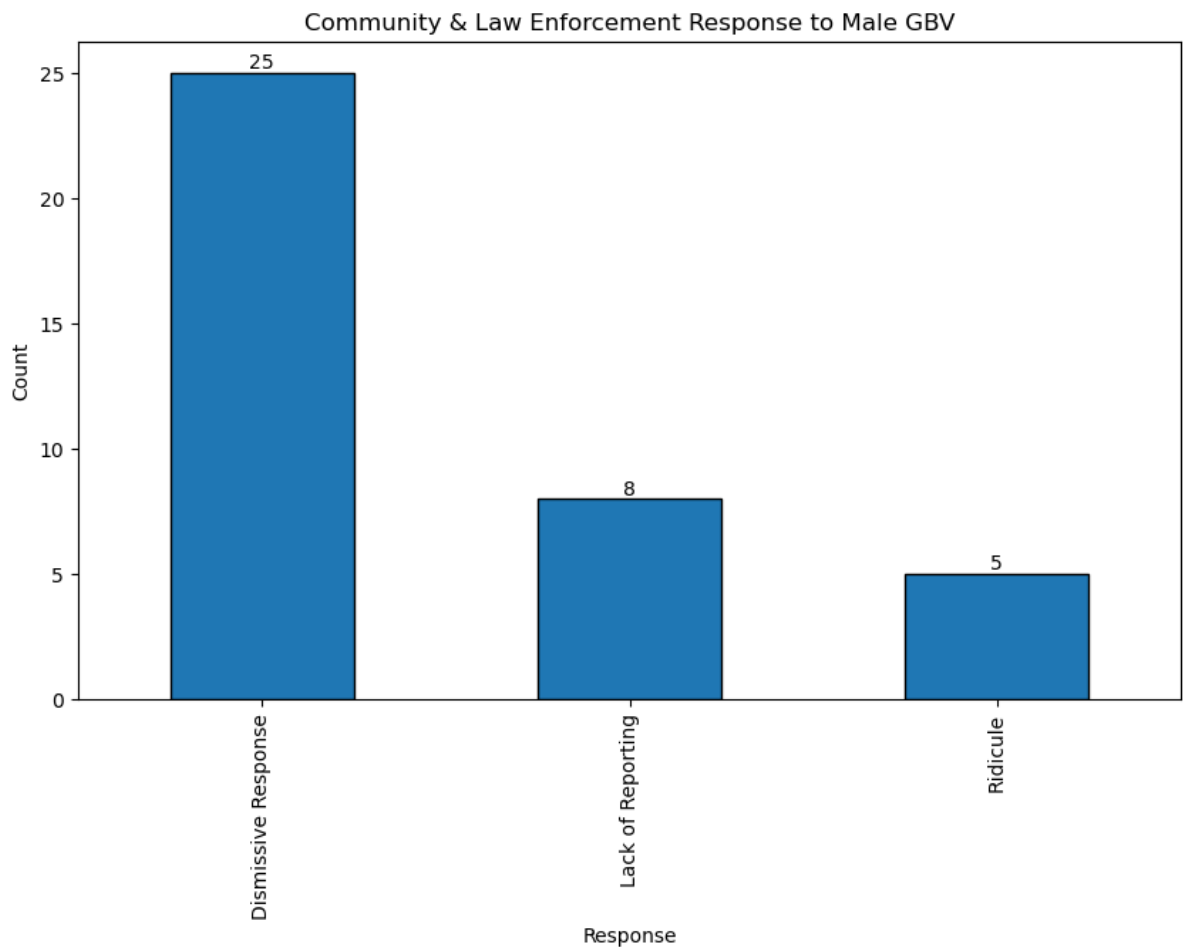
response_counts = responses.value_counts()

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Community & Law Enforcement Response to Male GBV')
plt.xticks(rotation=90)

for i, count in enumerate(response_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot9.png', dpi=300)
plt.show()

```



```

In [16]: df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")
response_data = df['Common GBV Against Men in Ghana']

# Split the responses and stack them into a single column
responses = response_data.str.split(", ", expand=True).stack()

# Count the occurrences of each response
response_counts = responses.value_counts()

# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Common GBV Against Men in Ghana')

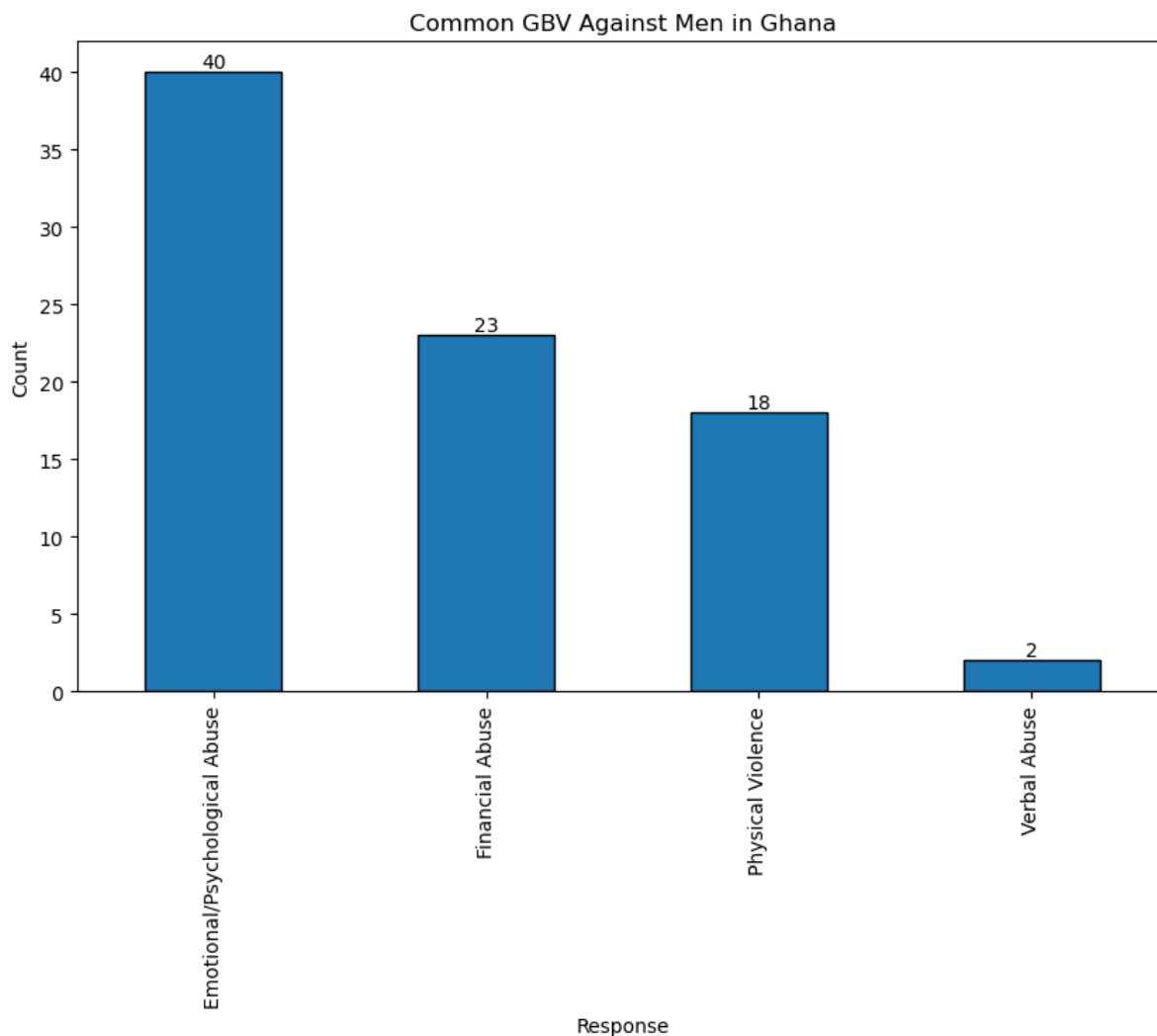
```



```
plt.xticks(rotation=90)

# Add value counts at the top of each bar
for i, count in enumerate(response_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot10.png', dpi=300)
plt.show()
```



```
In [17]: response_data = df['Community-based Approaches for GBV against Men in Ghana']

# Split the responses and stack them into a single column
responses = response_data.str.split(", ", expand=True).stack()

# Count the occurrences of each response
response_counts = responses.value_counts()

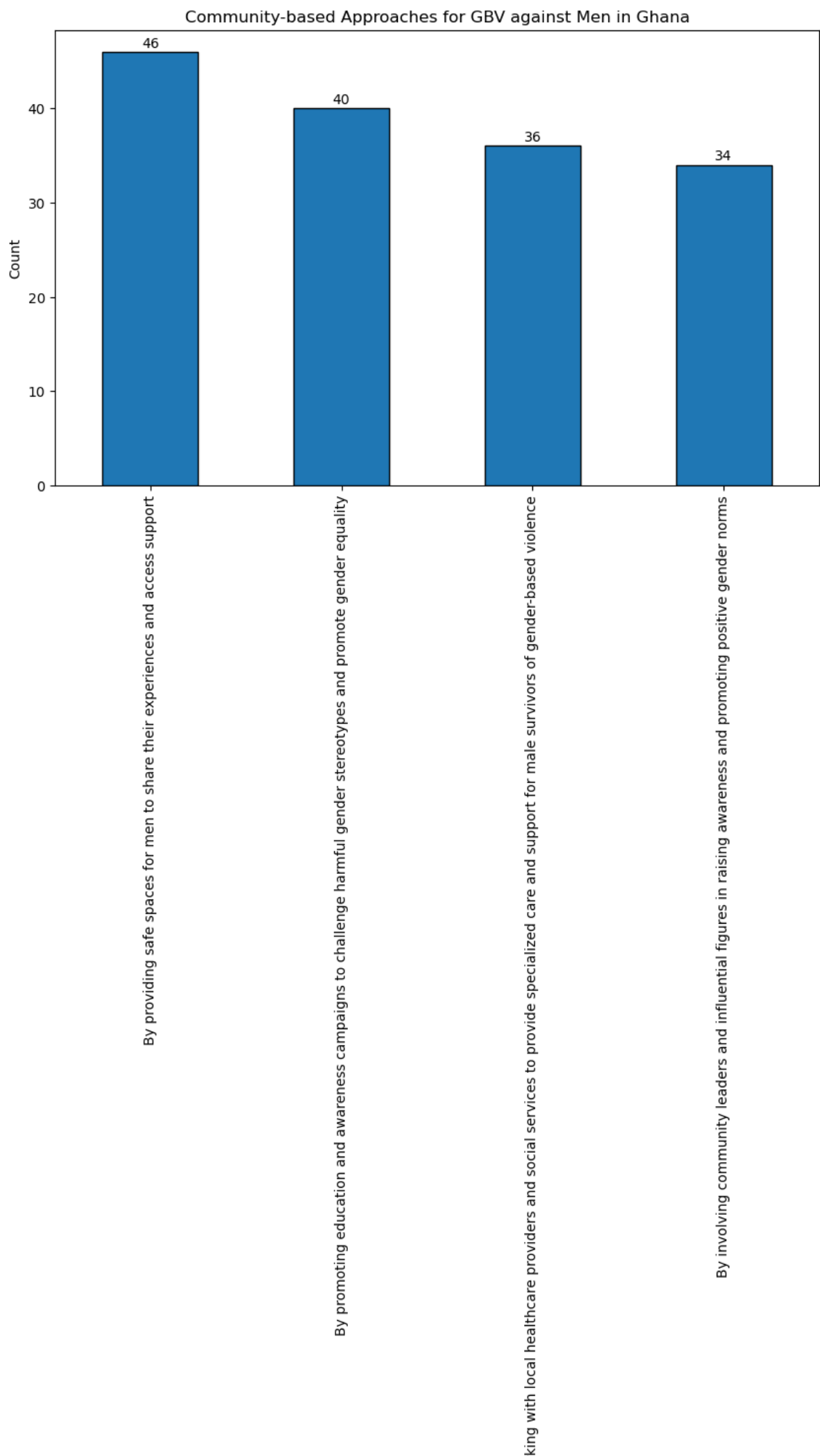
# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())

# Sort the counts in descending order
response_counts = response_counts.sort_values(ascending=False)

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Community-based Approaches for GBV against Men in Ghana')
```

```
# Add count values on top of each bar
for i, count in enumerate(response_counts):
    plt.text(i, count + 0.5, str(count), ha='center')

plt.xticks(rotation=90)
plt.savefig('plot11.png', dpi=300)
plt.show()
```



```
In [18]: df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")
response_data = df['Impact of Gender Norms on GBV against Men in Ghana']

# Split the responses and stack them into a single column
responses = response_data.str.split(",", expand=True).stack()

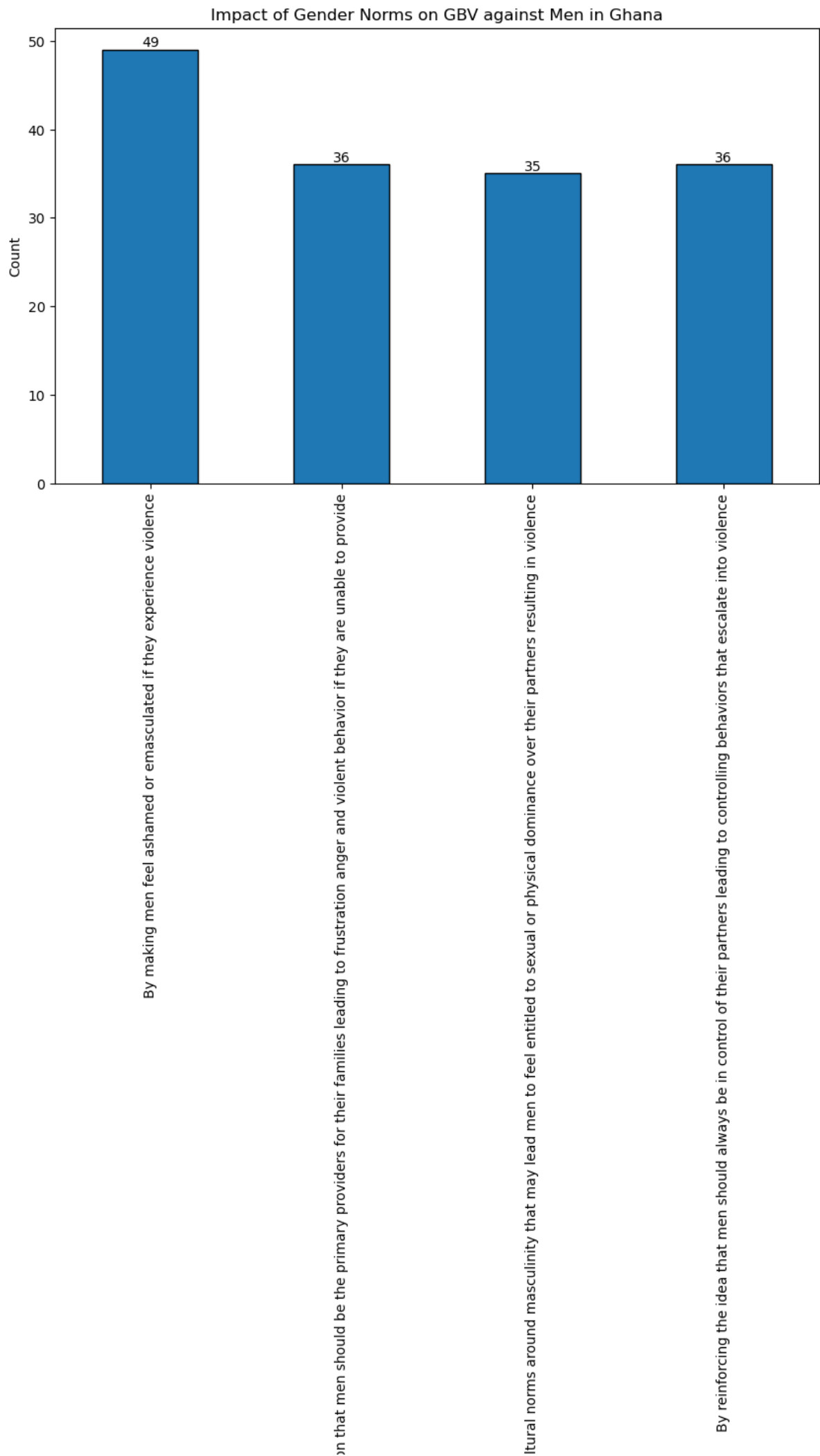
# Count the occurrences of each response
response_counts = responses.value_counts()

# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Impact of Gender Norms on GBV against Men in Ghana')
plt.xticks(rotation=90)

# Add value counts at the top of each bar
for i, count in enumerate(response_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot12.png', dpi=300)
plt.show()
```



```
In [19]: # Read the data
df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")

# Get the response data
response_data = df['Societal Beliefs and GBV against Men in Ghana']

# Split the responses and stack them into a single column
responses = response_data.str.split(", ", expand=True).stack()

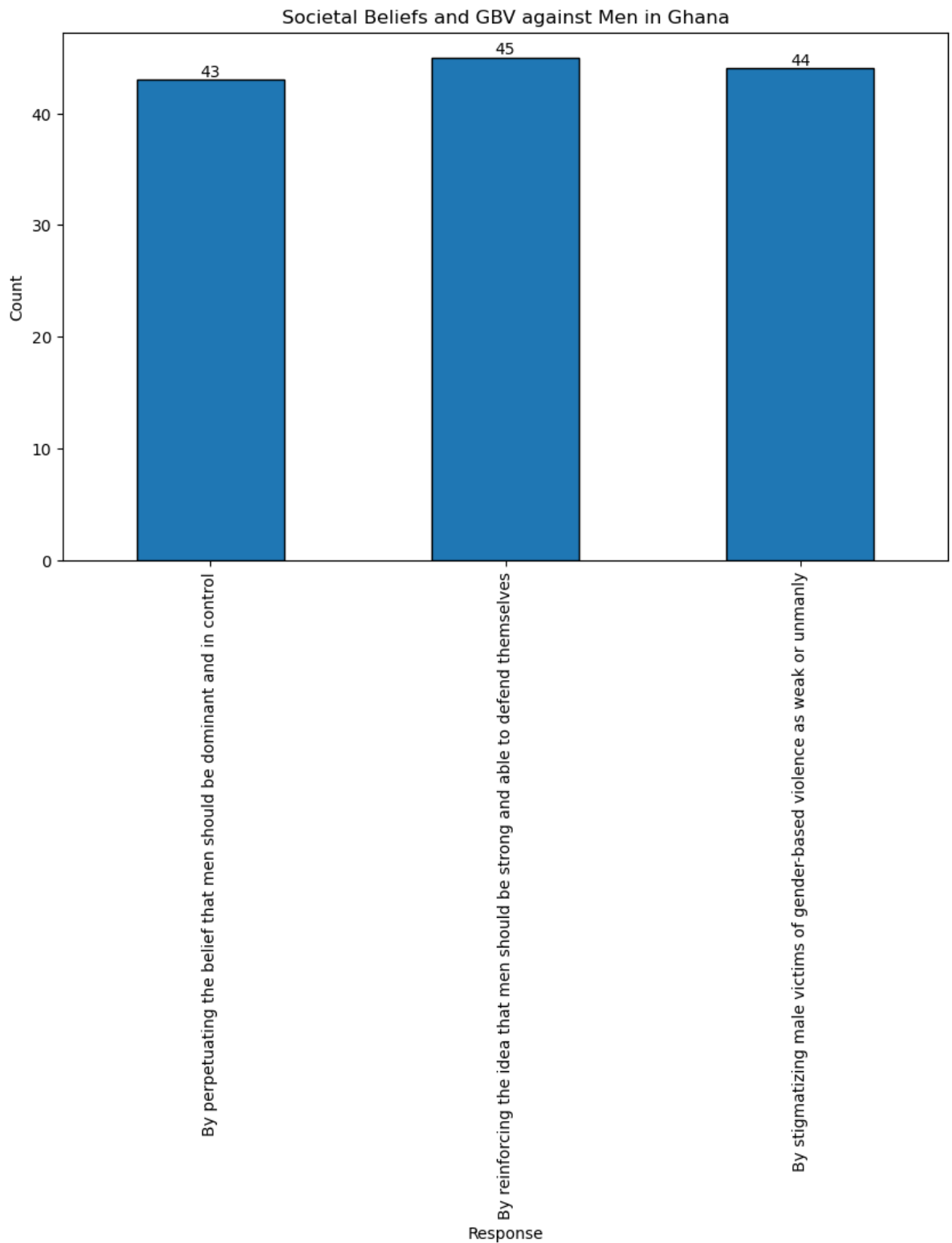
# Count the occurrences of each response
response_counts = responses.value_counts()

# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Societal Beliefs and GBV against Men in Ghana')
plt.xticks(rotation=90)

# Add value counts at the top of each bar
for i, count in enumerate(response_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot13.png', dpi=300)
plt.show()
```



```
In [20]: # Read the data
df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")

# Get the response data
response_data = df['Effects of GBV on Male Survivors in Ghana']

# Split the responses and stack them into a single column
responses = response_data.str.split(", ", expand=True).stack()

# Count the occurrences of each response
response_counts = responses.value_counts()

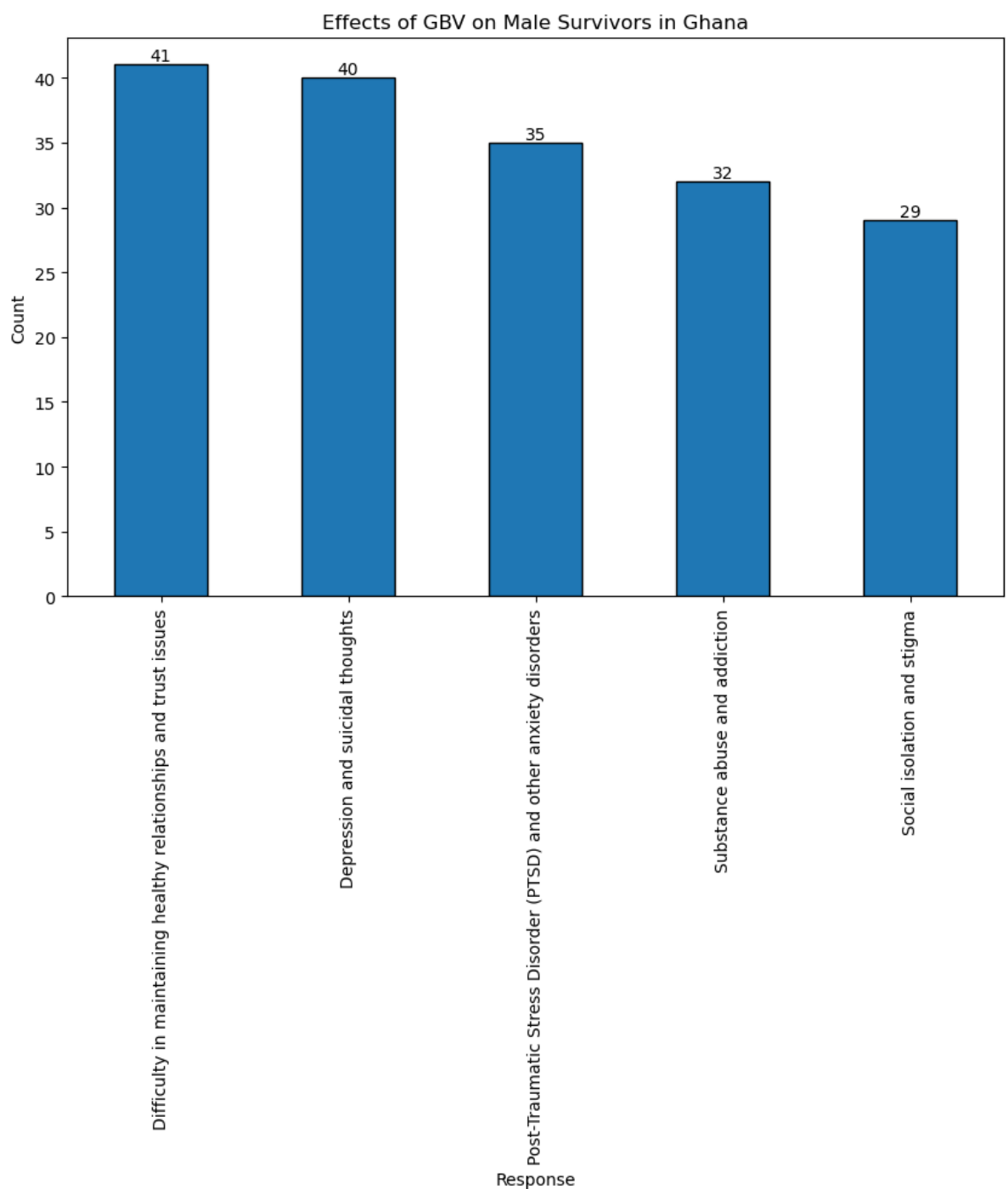
# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())
```

```
# Sort the counts in descending order
response_counts = response_counts.sort_values(ascending=False)

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Effects of GBV on Male Survivors in Ghana')
plt.xticks(rotation=90)

# Add value counts at the top of each bar
for i, count in enumerate(response_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot14.png', dpi=300)
plt.show()
```




```
In [21]: import pandas as pd
import matplotlib.pyplot as plt

# Read the data
df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")

# Get the response data
response_data = df['Legal Response to GBV against Men in Ghana']

# Split the responses and stack them into a single column
responses = response_data.str.split(",", expand=True).stack()

# Count the occurrences of each response
response_counts = responses.value_counts()

# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())

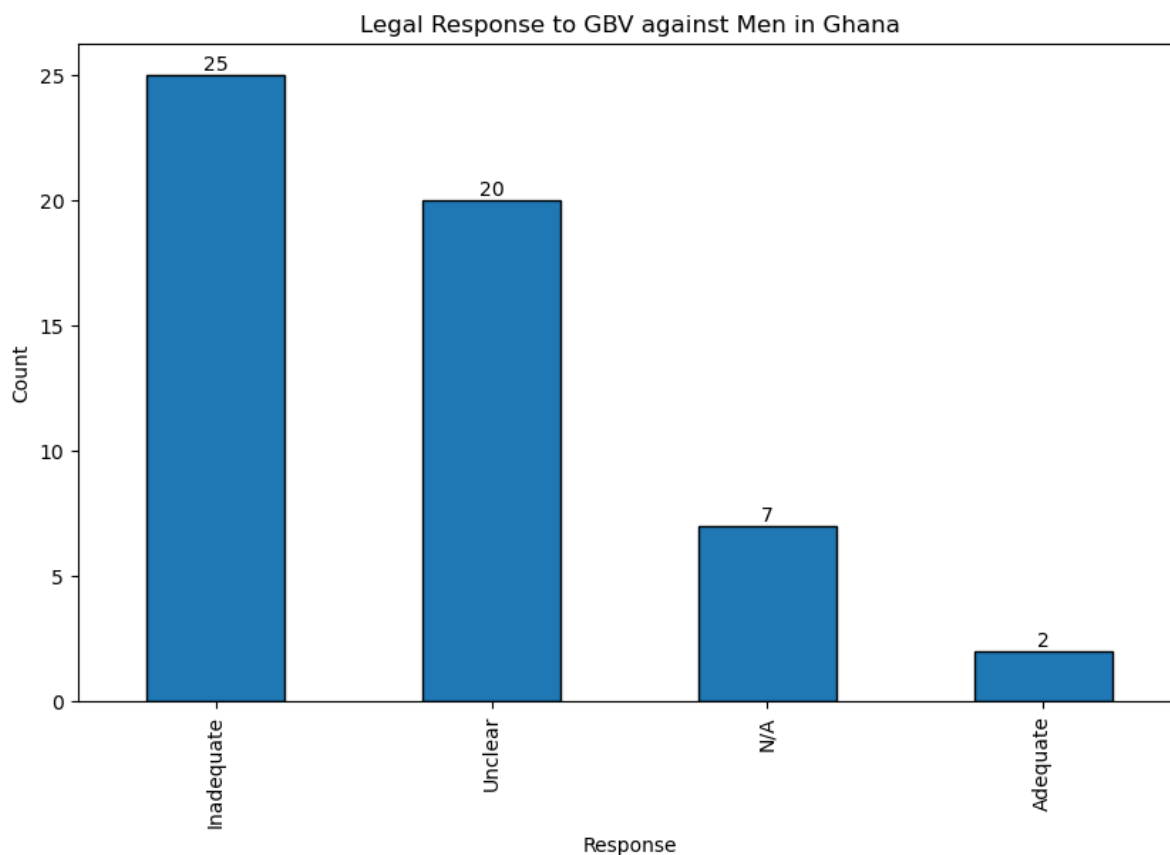
# Include N/A category in the counts
n_a_count = df['Legal Response to GBV against Men in Ghana'].isna().sum()
response_counts['N/A'] = n_a_count

# Sort the counts in descending order
response_counts = response_counts.sort_values(ascending=False)

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Legal Response to GBV against Men in Ghana')
plt.xticks(rotation=90)

# Add value counts at the top of each bar
for i, count in enumerate(response_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot15.png', dpi=300)
plt.show()
```



```
In [22]: # Read the data
df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")

# Get the response data
response_data = df['Role of Women in Supporting Male Survivors']

# Split the responses and stack them into a single column
responses = response_data.str.split(",", expand=True).stack()

# Count the occurrences of each response
response_counts = responses.value_counts()

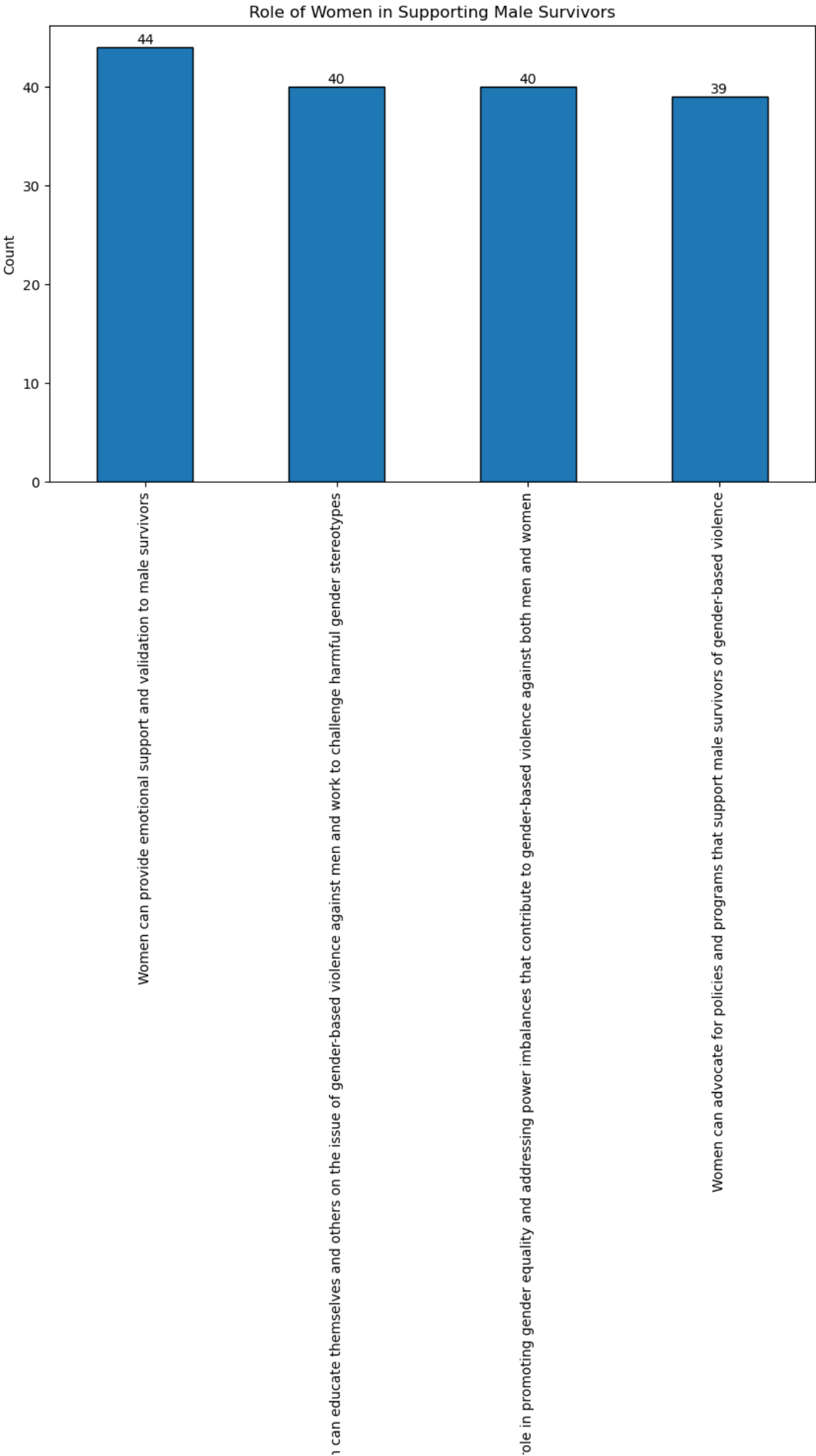
# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())

# Sort the counts in descending order
response_counts = response_counts.sort_values(ascending=False)

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Role of Women in Supporting Male Survivors')
plt.xticks(rotation=90)

# Add value counts at the top of each bar
for i, count in enumerate(response_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot16.png', dpi=300)
plt.show()
```



```
In [23]: # Read the data
df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")

# Get the response data
response_data = df['\nBarriers for Men Seeking GBV Support in Ghana']

# Split the responses and stack them into a single column
responses = response_data.str.split(", ", expand=True).stack()

# Count the occurrences of each response
response_counts = responses.value_counts()

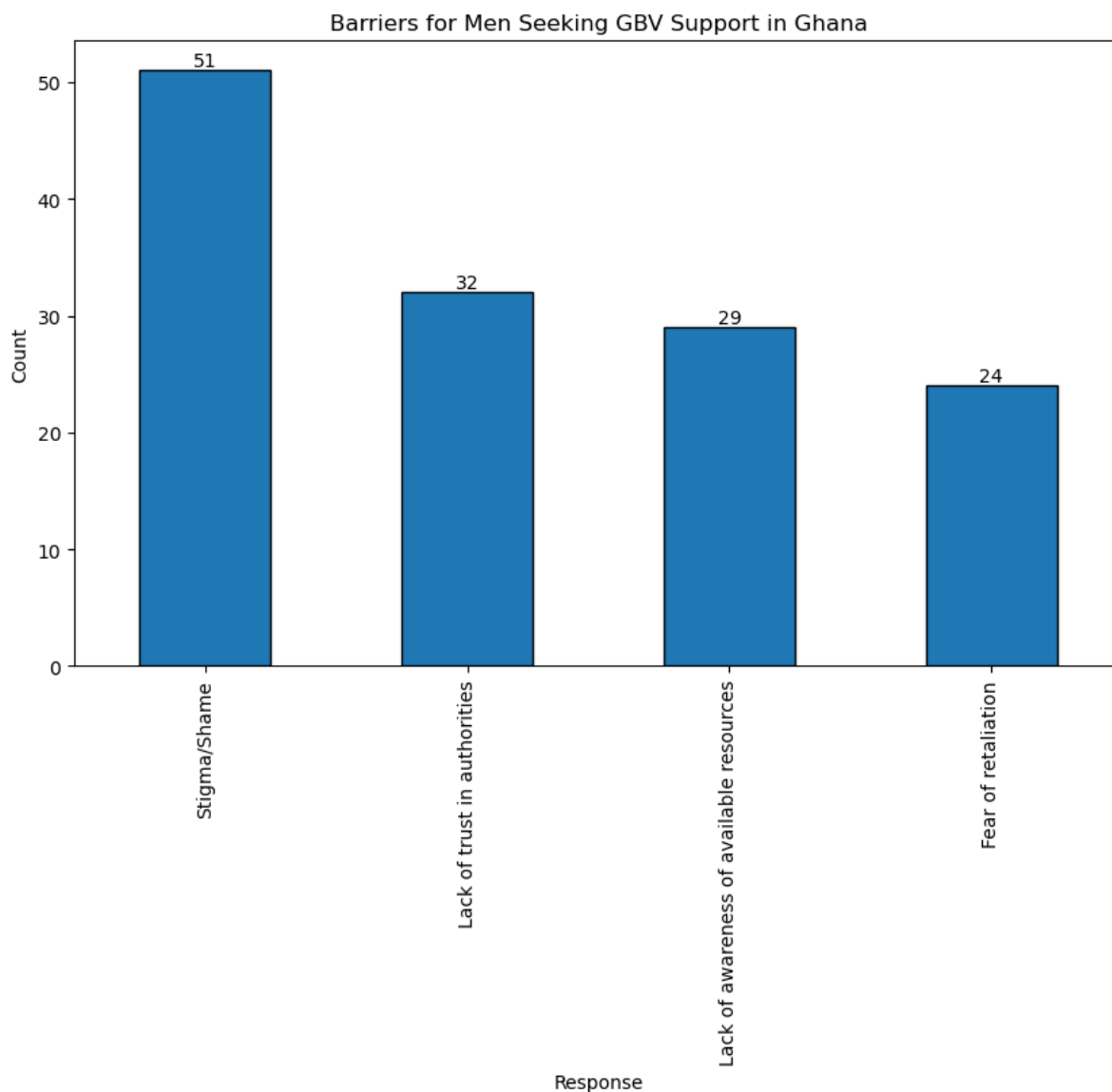
# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())

# Sort the counts in descending order
response_counts = response_counts.sort_values(ascending=False)

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Barriers for Men Seeking GBV Support in Ghana')
plt.xticks(rotation=90)

# Add value counts at the top of each bar
for i, count in enumerate(response_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot17.png', dpi=300)
plt.show()
```



```
In [24]: # Read the data
df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")

# Get the response data
response_data = df['Economic Impact on GBV against Men in Ghana']

# Split the responses and stack them into a single column
responses = response_data.str.split(",", expand=True).stack()

# Count the occurrences of each response
response_counts = responses.value_counts()

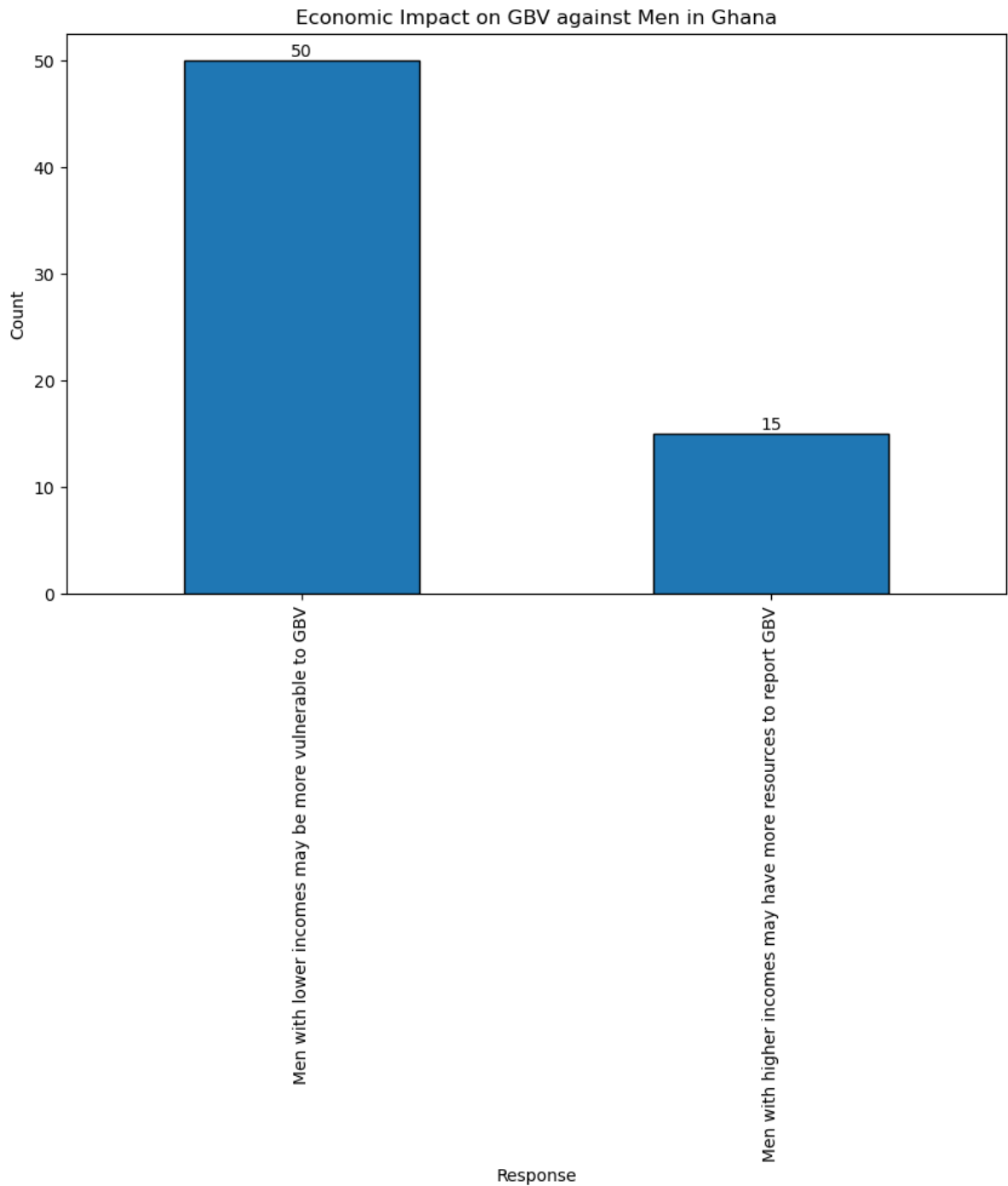
# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())

# Sort the counts in descending order
response_counts = response_counts.sort_values(ascending=False)

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Economic Impact on GBV against Men in Ghana')
plt.xticks(rotation=90)
```

```
# Add value counts at the top of each bar
for i, count in enumerate(response_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot18.png', dpi=300)
plt.show()
```



```
In [25]: # Read the data
df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")

# Get the response data
response_data = df['Political Impact on GBV against Men in Ghana']

# Split the responses and stack them into a single column
responses = response_data.str.split(",", expand=True).stack()

# Count the occurrences of each response
response_counts = responses.value_counts()
```

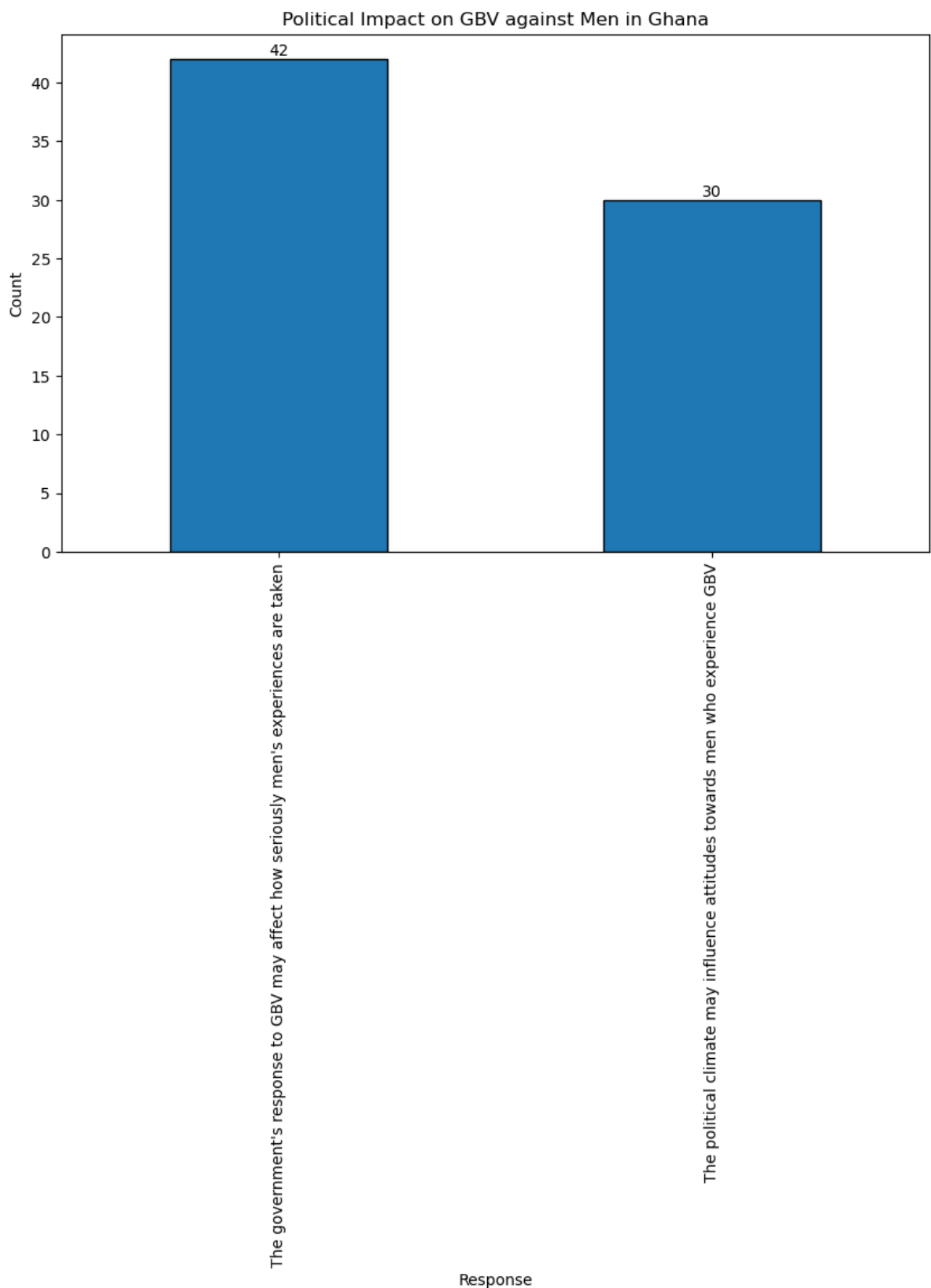
```
# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())

# Sort the counts in descending order
response_counts = response_counts.sort_values(ascending=False)

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Political Impact on GBV against Men in Ghana')
plt.xticks(rotation=90)

# Add value counts at the top of each bar
for i, count in enumerate(response_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot19.png', dpi=300)
plt.show()
```



```
In [26]: # Read the data
df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")

# Get the response data
response_data = df['Social Impact on GBV against Men in Ghana']

# Split the responses and stack them into a single column
responses = response_data.str.split(",", expand=True).stack()

# Count the occurrences of each response
response_counts = responses.value_counts()
```



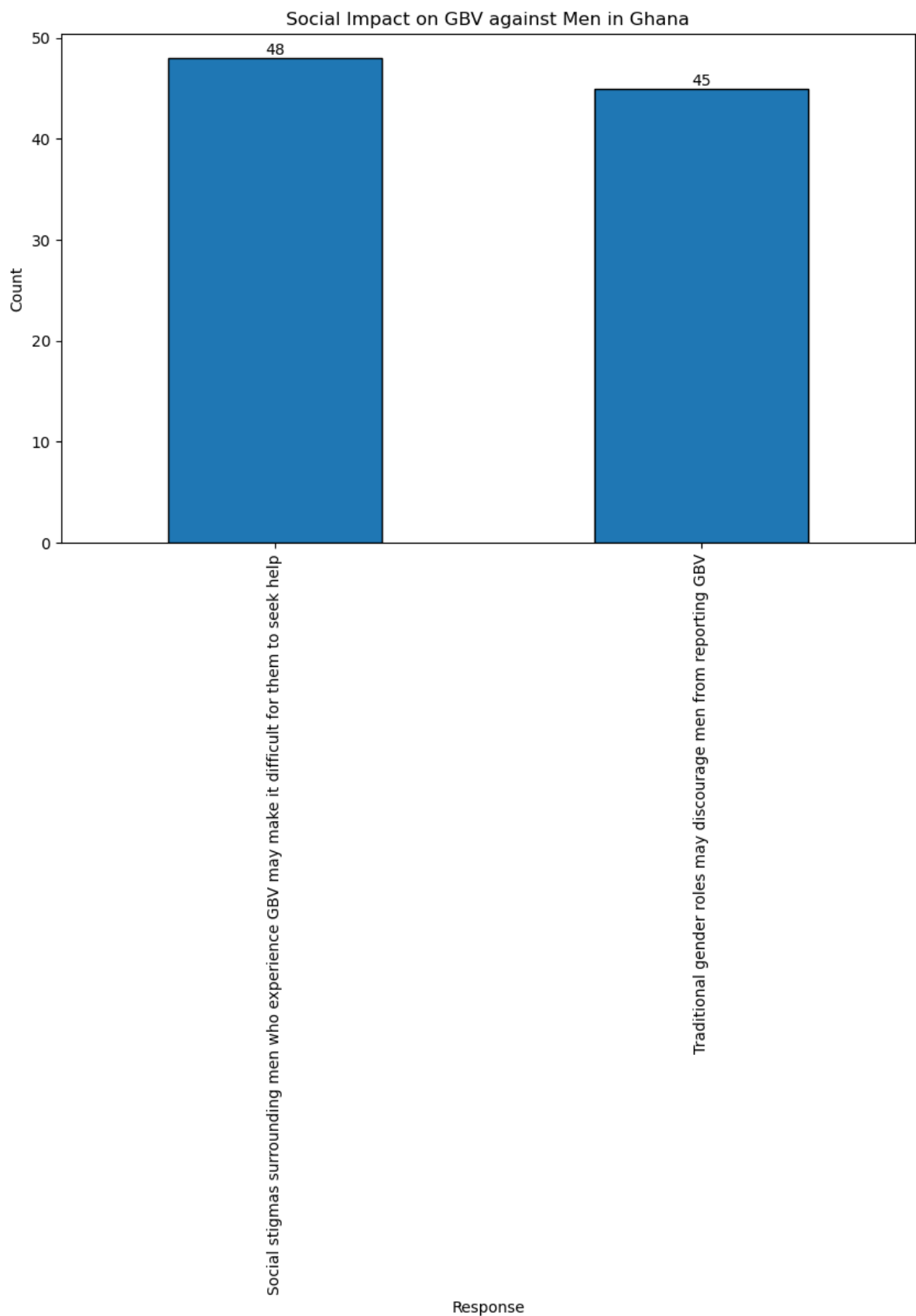
```
# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())

# Sort the counts in descending order
response_counts = response_counts.sort_values(ascending=False)

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Social Impact on GBV against Men in Ghana')
plt.xticks(rotation=90)

# Add value counts at the top of each bar
for i, count in enumerate(response_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot20.png', dpi=300)
plt.show()
```



```
In [27]: # Read the data
df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")

# Get the response data
response_data = df['Challenges and Support for Male GBV Survivors in Ghana']

# Split the responses and stack them into a single column
responses = response_data.str.split(",", expand=True).stack()

# Count the occurrences of each response
```

```
response_counts = responses.value_counts()

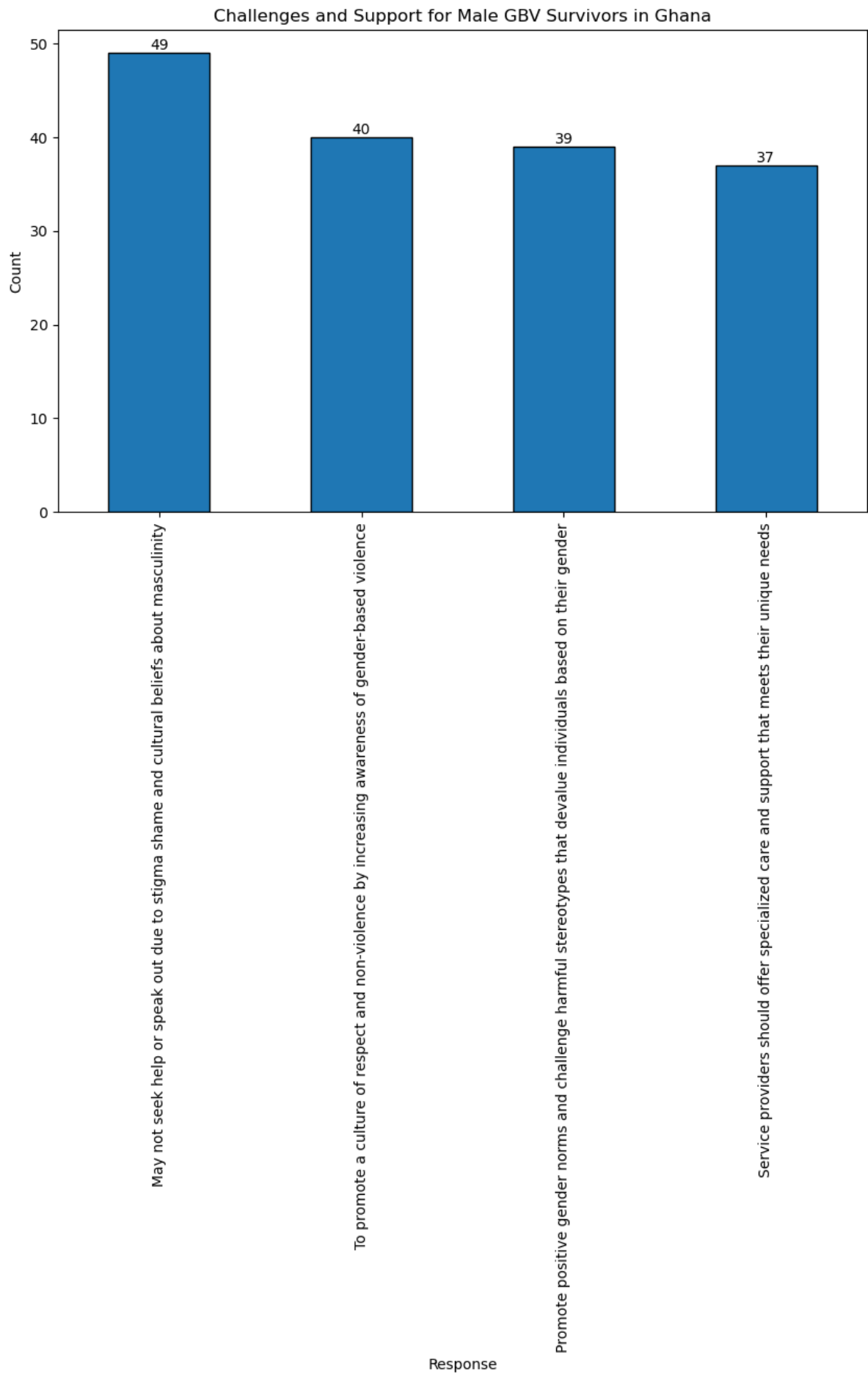
# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())

# Sort the counts in descending order
response_counts = response_counts.sort_values(ascending=False)

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Challenges and Support for Male GBV Survivors in Ghana')
plt.xticks(rotation=90)

# Add value counts at the top of each bar
for i, count in enumerate(response_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot21.png', dpi=300)
plt.show()
```



```
In [28]: # Read the data
df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")

# Get the response data
response_data = df['Legal and Policy Reforms for GBV against Men in Ghana']
```

```
# Split the responses and stack them into a single column
responses = response_data.str.split(",", expand=True).stack()

# Count the occurrences of each response
response_counts = responses.value_counts()

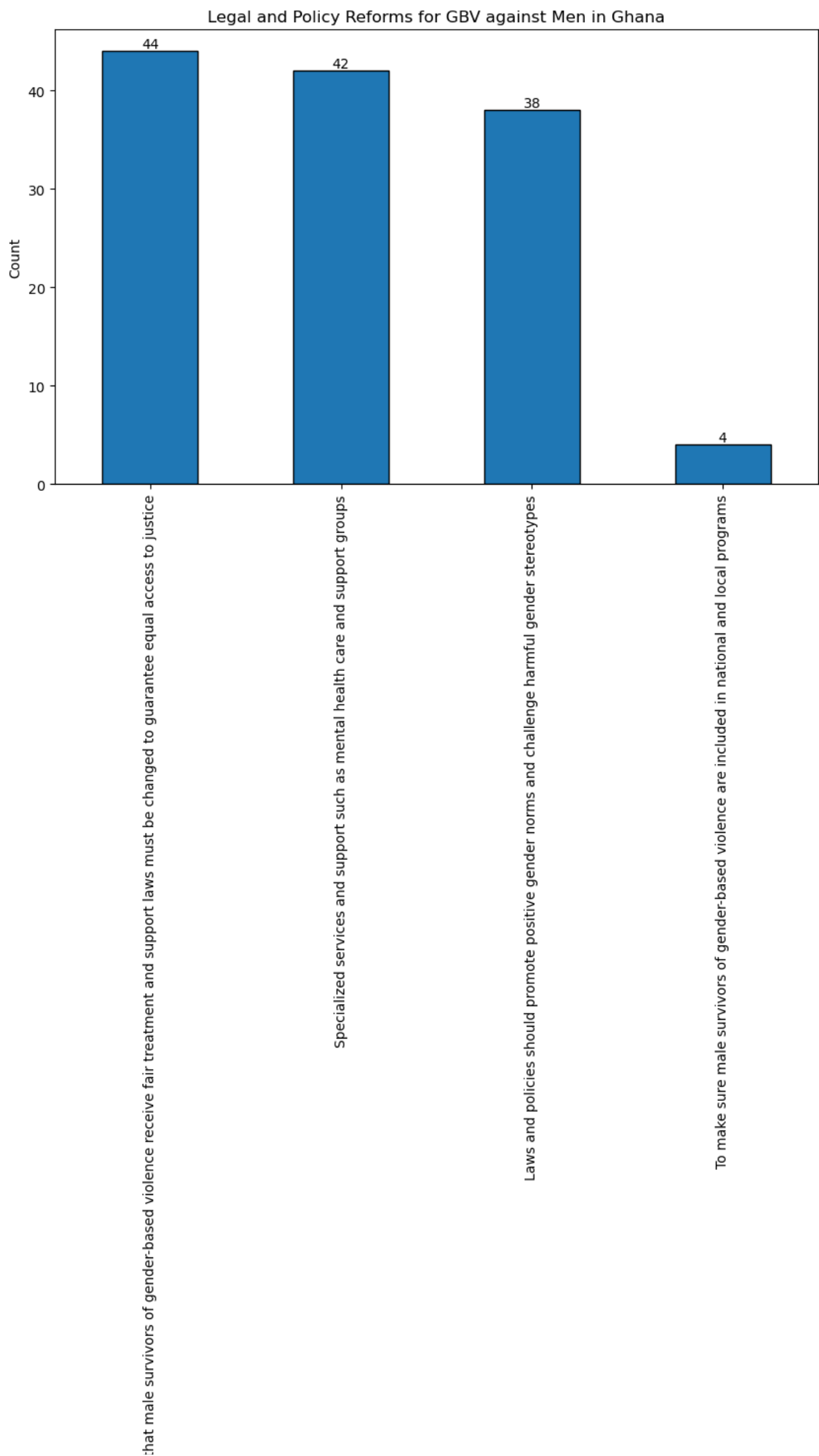
# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())

# Sort the counts in descending order
response_counts = response_counts.sort_values(ascending=False)

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Legal and Policy Reforms for GBV against Men in Ghana')
plt.xticks(rotation=90)

# Add value counts at the top of each bar
for i, count in enumerate(response_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot22.png', dpi=300)
plt.show()
```



```
In [29]: # Read the data
df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")

# Get the response data
response_data = df['Harmful Beliefs and Attitudes about Masculinity on Gender-Based Violence']

# Split the responses and stack them into a single column
responses = response_data.str.split(", ", expand=True).stack()

# Count the occurrences of each response
response_counts = responses.value_counts()

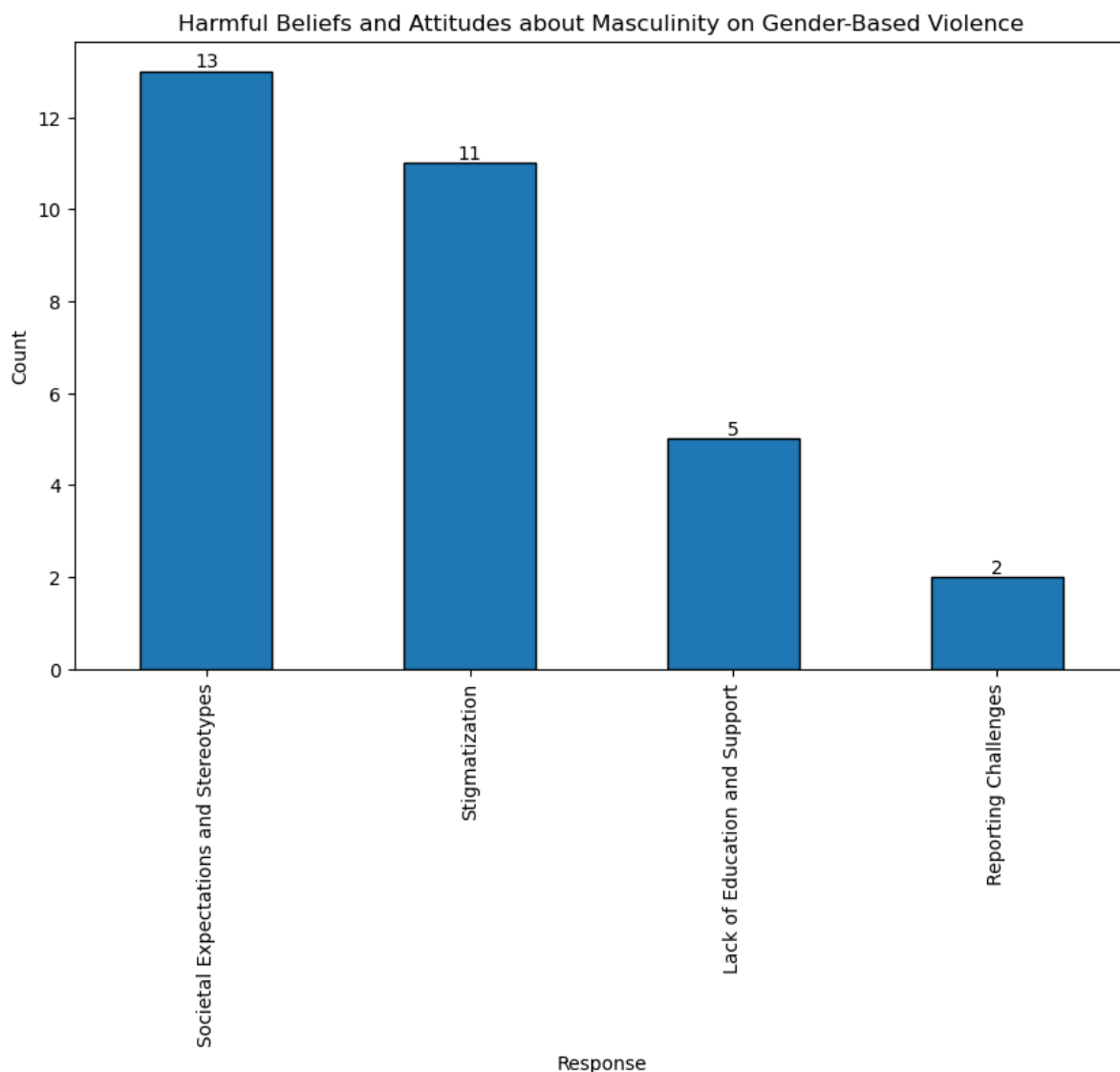
# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())

# Sort the counts in descending order
response_counts = response_counts.sort_values(ascending=False)

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Harmful Beliefs and Attitudes about Masculinity on Gender-Based Violence')
plt.xticks(rotation=90)

# Add value counts at the top of each bar
for i, count in enumerate(response_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot23.png', dpi=300)
plt.show()
```



```
In [30]: # Read the data
df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")

# Get the response data
response_data = df['Missing Services for Male GBV Survivors in Ghana']

# Split the responses and stack them into a single column
responses = response_data.str.split(",", expand=True).stack()

# Count the occurrences of each response
response_counts = responses.value_counts()

# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())

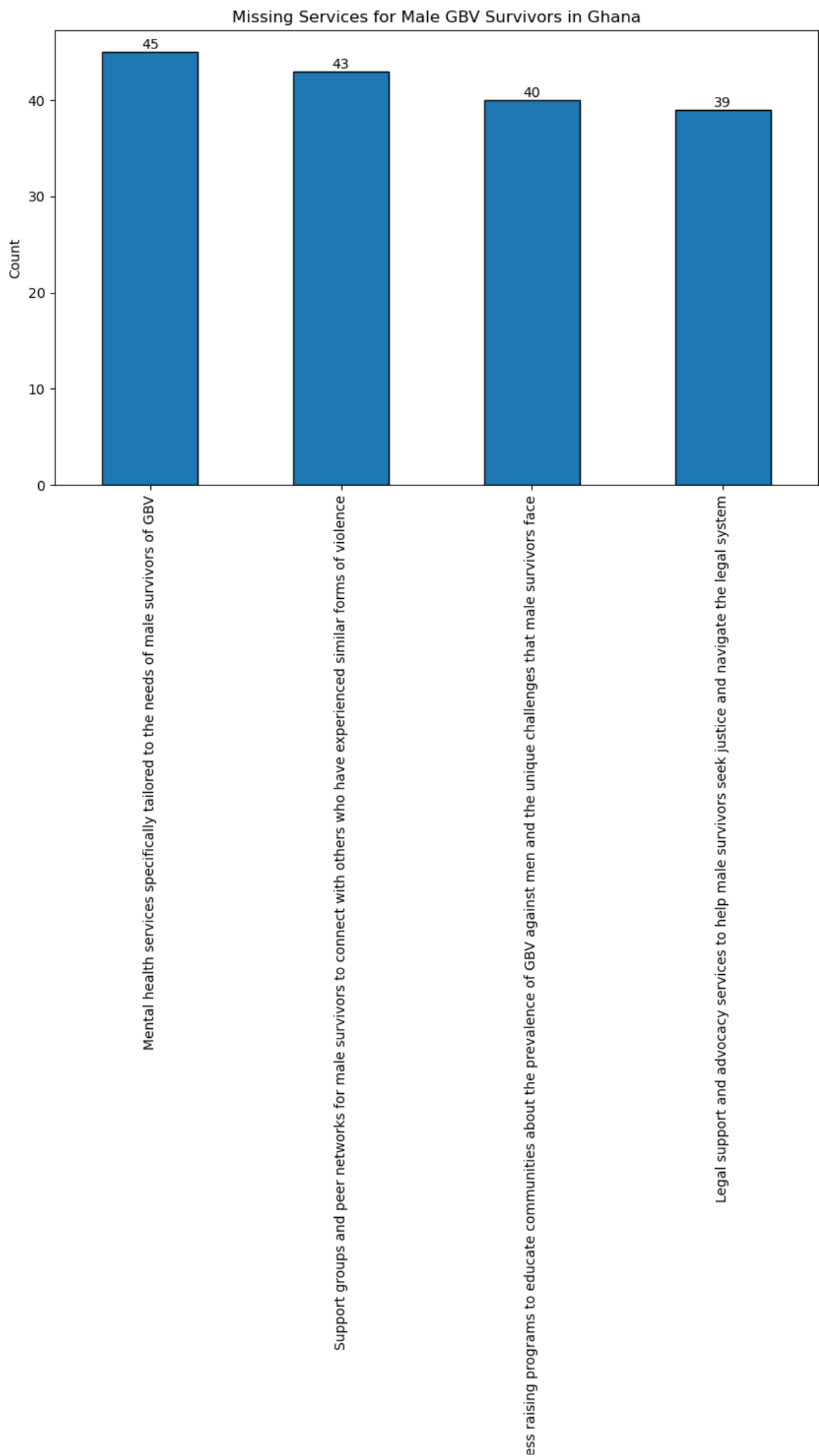
# Sort the counts in descending order
response_counts = response_counts.sort_values(ascending=False)

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('Missing Services for Male GBV Survivors in Ghana')
plt.xticks(rotation=90)

# Add value counts at the top of each bar
```



```
for i, count in enumerate(response_counts):  
    plt.text(i, count, str(count), ha='center', va='bottom')  
  
plt.savefig('plot24.png', dpi=300)  
plt.show()
```



```
In [31]: # Read the data
df = pd.read_csv("GBV (Responses) - Form Responses 4.0.csv")

# Get the response data
response_data = df['Solutions to GBV Against Men']

# Split the responses and stack them into a single column
responses = response_data.str.split(", ", expand=True).stack()

# Count the occurrences of each response
response_counts = responses.value_counts()

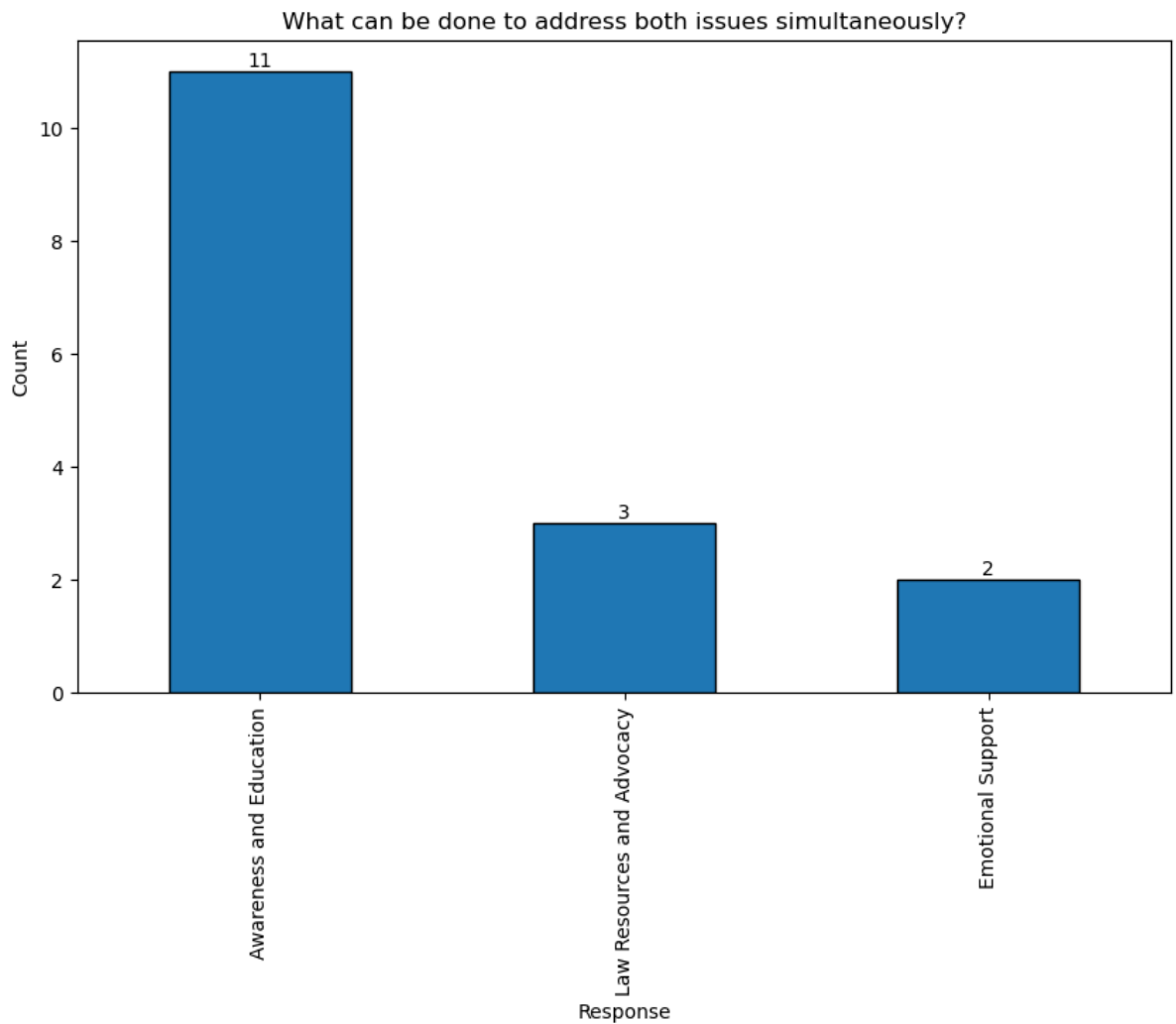
# Merge all duplicate categories
response_counts = response_counts.groupby(response_counts.index.str.strip())

# Sort the counts in descending order
response_counts = response_counts.sort_values(ascending=False)

# Plot the bar graph
plt.figure(figsize=(10, 6))
response_counts.plot(kind='bar', edgecolor='black')
plt.xlabel('Response')
plt.ylabel('Count')
plt.title('What can be done to address both issues simultaneously?')
plt.xticks(rotation=90)

# Add value counts at the top of each bar
for i, count in enumerate(response_counts):
    plt.text(i, count, str(count), ha='center', va='bottom')

plt.savefig('plot25.png', dpi=300)
plt.show()
```



```
In [32]: with PdfPages('plots1.pdf') as pdf:
          for filename in ['plot1.jpg', 'plot2.png', 'plot3.png', 'plot4.png', 'pl
                        'plot8.png', 'plot9.png', 'plot10.png', 'plot11.png', 'plot1
                        'plot15.png', 'plot16.png', 'plot17.png', 'plot18.png', 'plo
                        'plot22.png', 'plot23.png', 'plot24.png', 'plot25.png']:
```

```
            fig = plt.figure()
            img = plt.imread(filename)
            plt.imshow(img)
            plt.axis('off')
            pdf.savefig(fig)
            pdf.savefig(fig, dpi=300)
            plt.close()
```

```
In [ ]:
```