

EDA of Fatalities in the Israeli- Palestinian Conflict

by Kenneth Jamco 3-2

Overview of the Conflict

- Origins date back to late 19th century with the rise of the Zionist Movement and the idea of creating a Jewish homeland in Palestine gained traction.
- Key Issues: Borders, Status of Jerusalem, Rights of Palestinian refugees, Establishment of a two Palestinian states.
- In 1948, United Nations' plan to divide Palestine into two states, one for Jewish people and one for the Arabs.
- Opposition from Arab nations led to a war with Israel. This resulted into foundation of the State of Israel and displacement of thousands of Palestinians.



Objectives and Goals

01

Provide a comprehensive overview of fatalities in the Israeli-Palestinian Conflict, starting from the year 2000

02

Analyze and explore patterns, trends, underlying factors related to fatalities.

03

Answer this questions about the dataset:

- Overall trends in fatal incidents over time
- Identification of hotspots with high fatality rates
- Find evidence of conflict escalation and de-escalation by the involved parties over time.

Understanding the Dataset

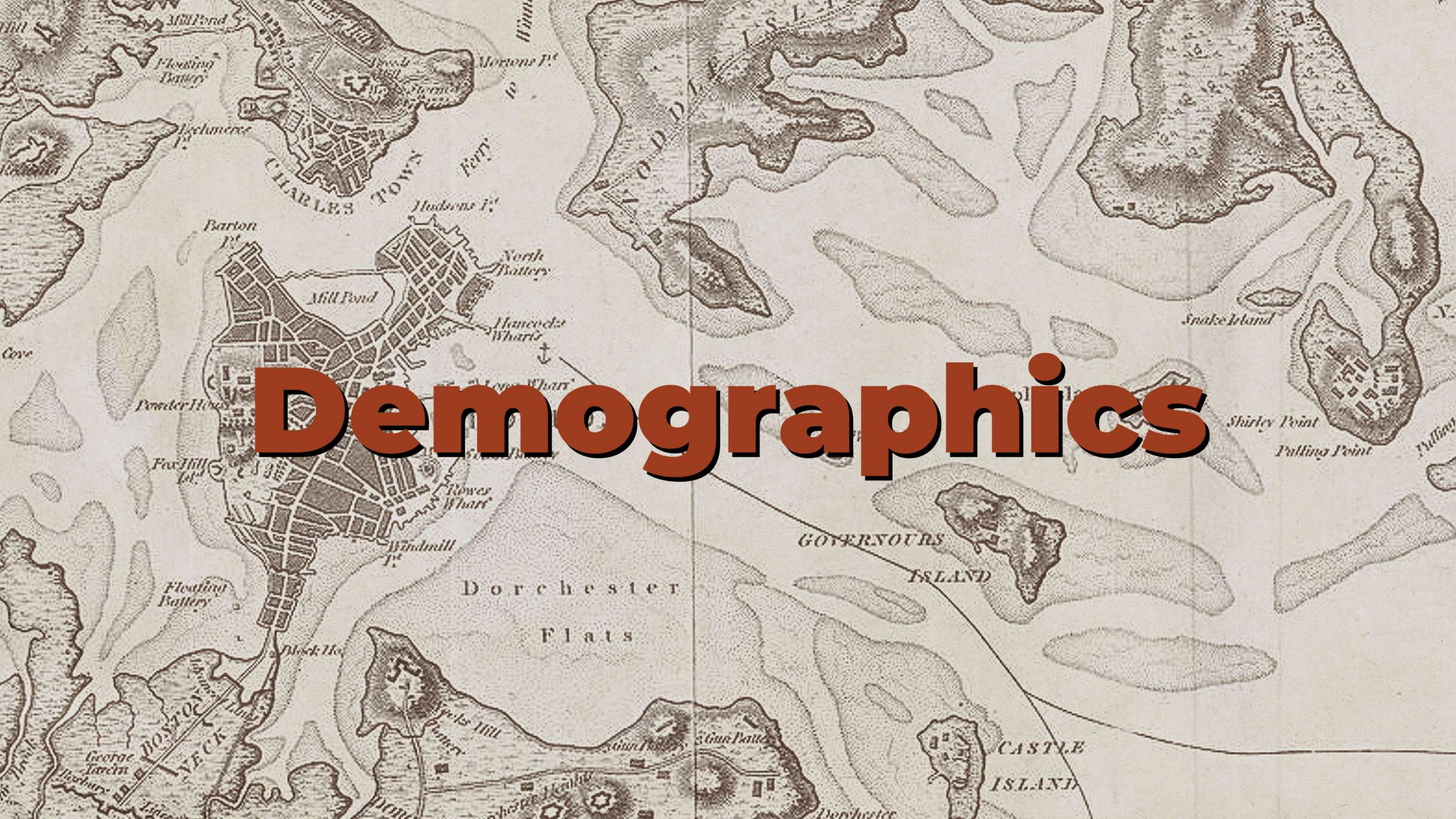
- This dataset contains 11,124 rows and 16 columns.

Columns

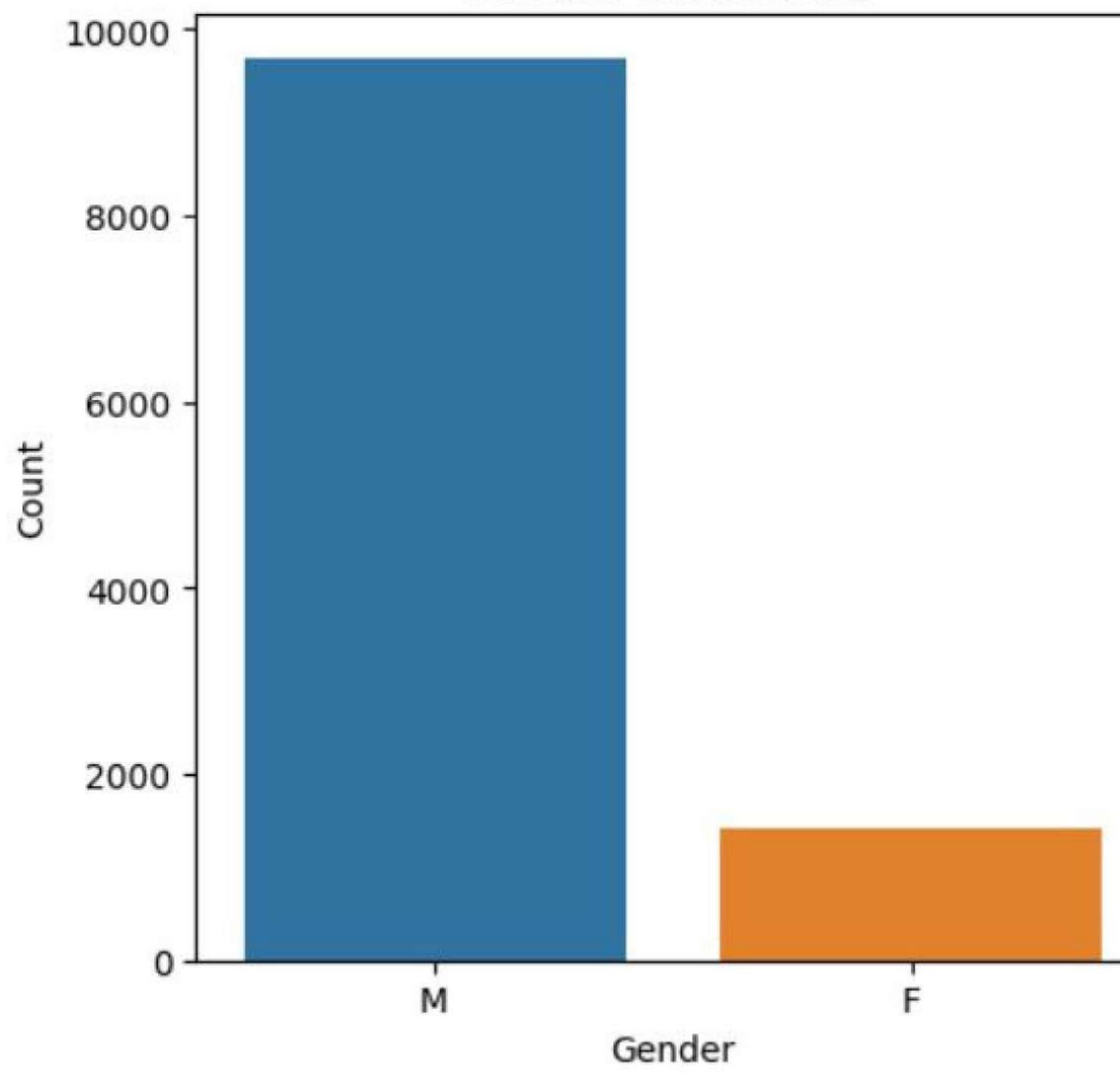
- name:** The name of the deceased individual, including their full name.
- date_of_event:** The date when the incident leading to the fatality occurred.
- age:** The age of the deceased individual at the time of the incident.
- citizenship:** The citizenship or nationality of the deceased person (e.g., Palestinian, Israeli).
- event_location:** The specific location where the incident occurred.
- event_location_district:** The district or region within which the incident location is situated.
- event_location_region:** The broader region where the incident took place (e.g., West Bank).
- date_of_death:** The date when the individual died as a result of the incident.
- gender:** The gender of the deceased individual (e.g., M for male).
- took_part_in_the_hostilities:** Information about whether the deceased person took part in hostilities or was involved in any conflict-related activities.
- place_of_residence:** The place of residence of the deceased individual at the time of the incident.
- place_of_residence_district:** The district or region where the deceased person resided.
- type_of_injury:** The specific type of injury sustained by the deceased individual (e.g., "gunfire," "stabbing").
- ammunition:** The type of ammunition used in the incident resulting in the fatality.
- killed_by:** The entity or party responsible for causing the death of the individual (e.g., "Israeli security forces," "Palestinian civilians").
- notes:** Additional information or context about the specific incident, including details about the circumstances, triggers, or other relevant factors.

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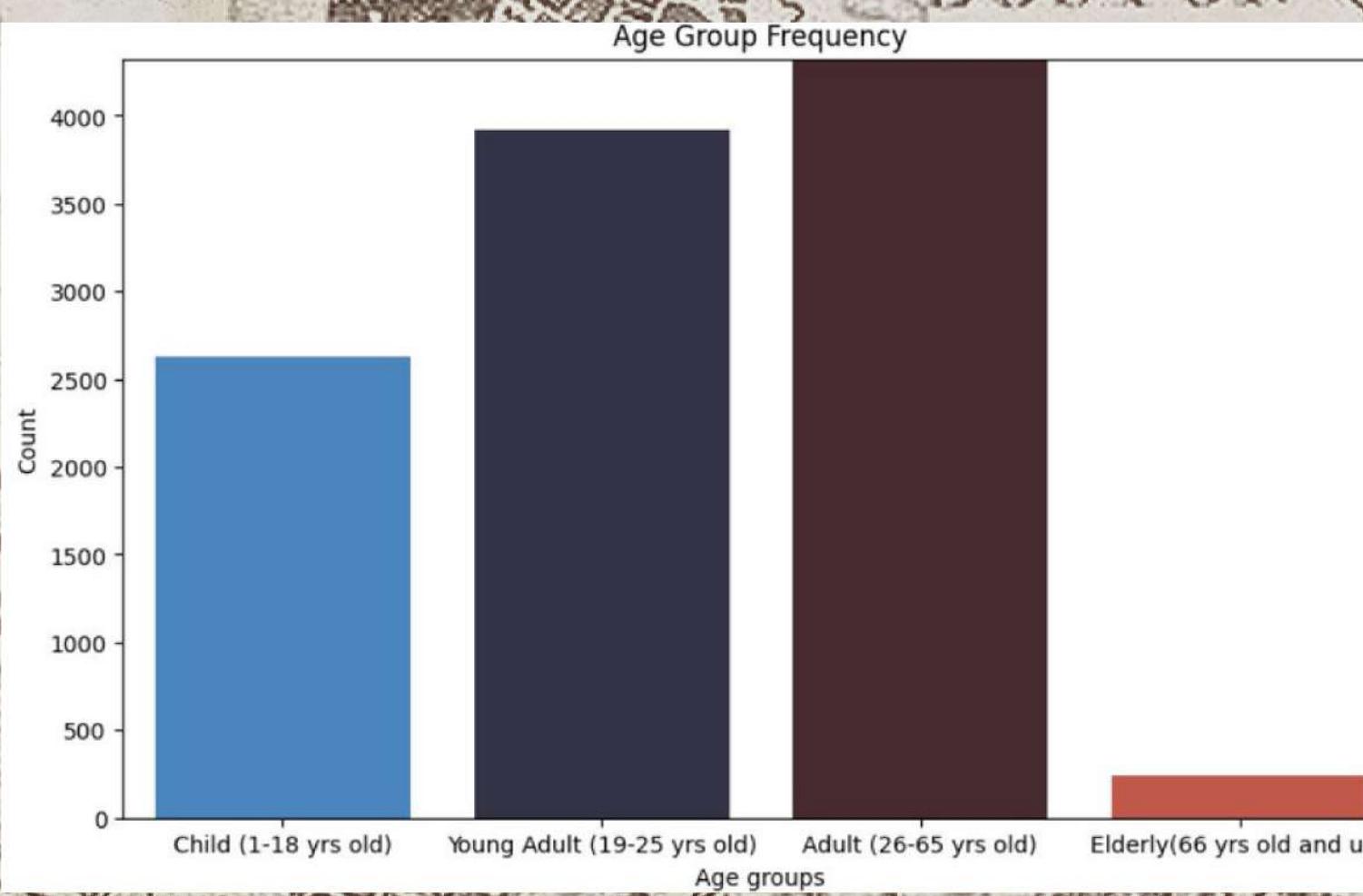
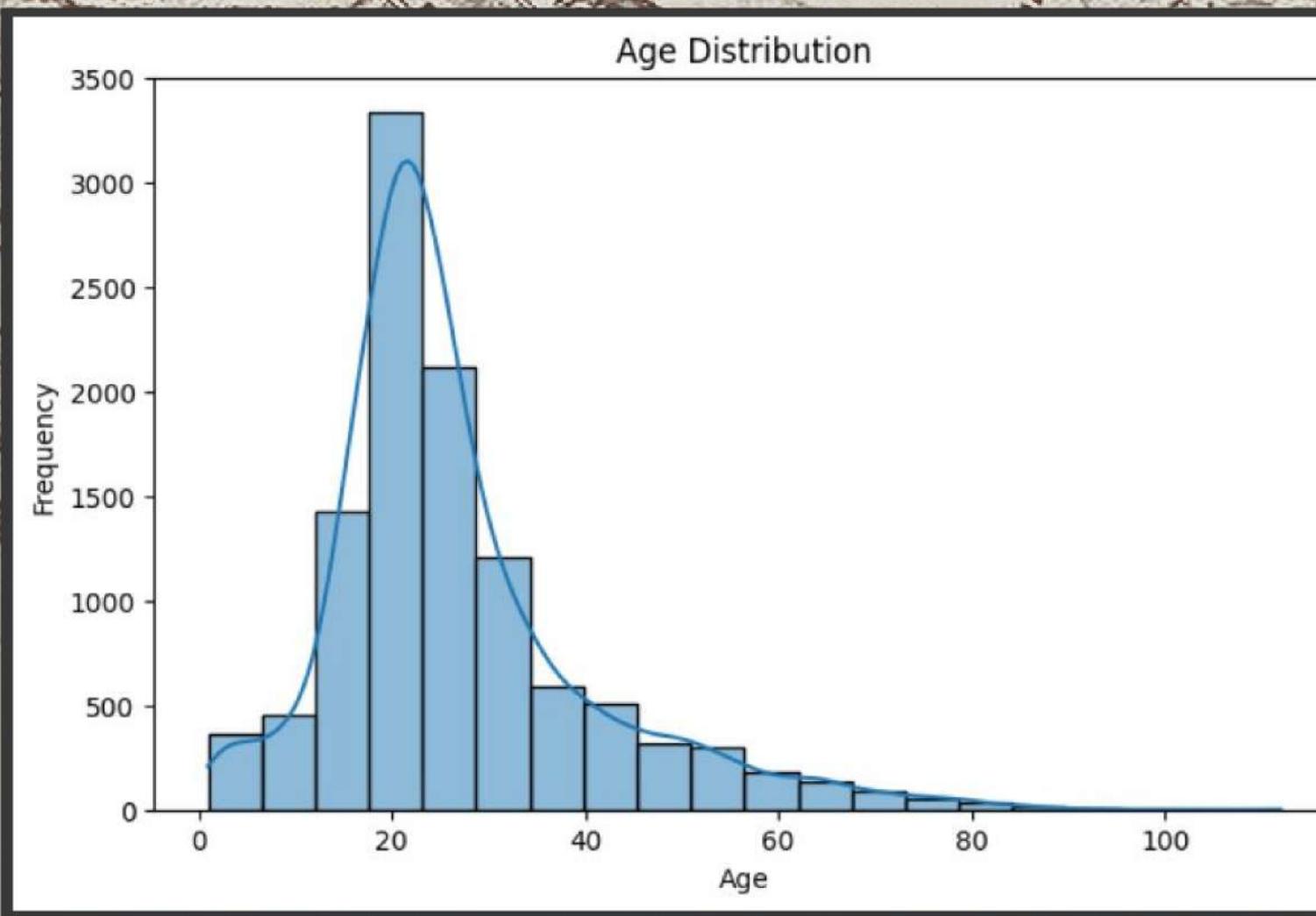
demographics



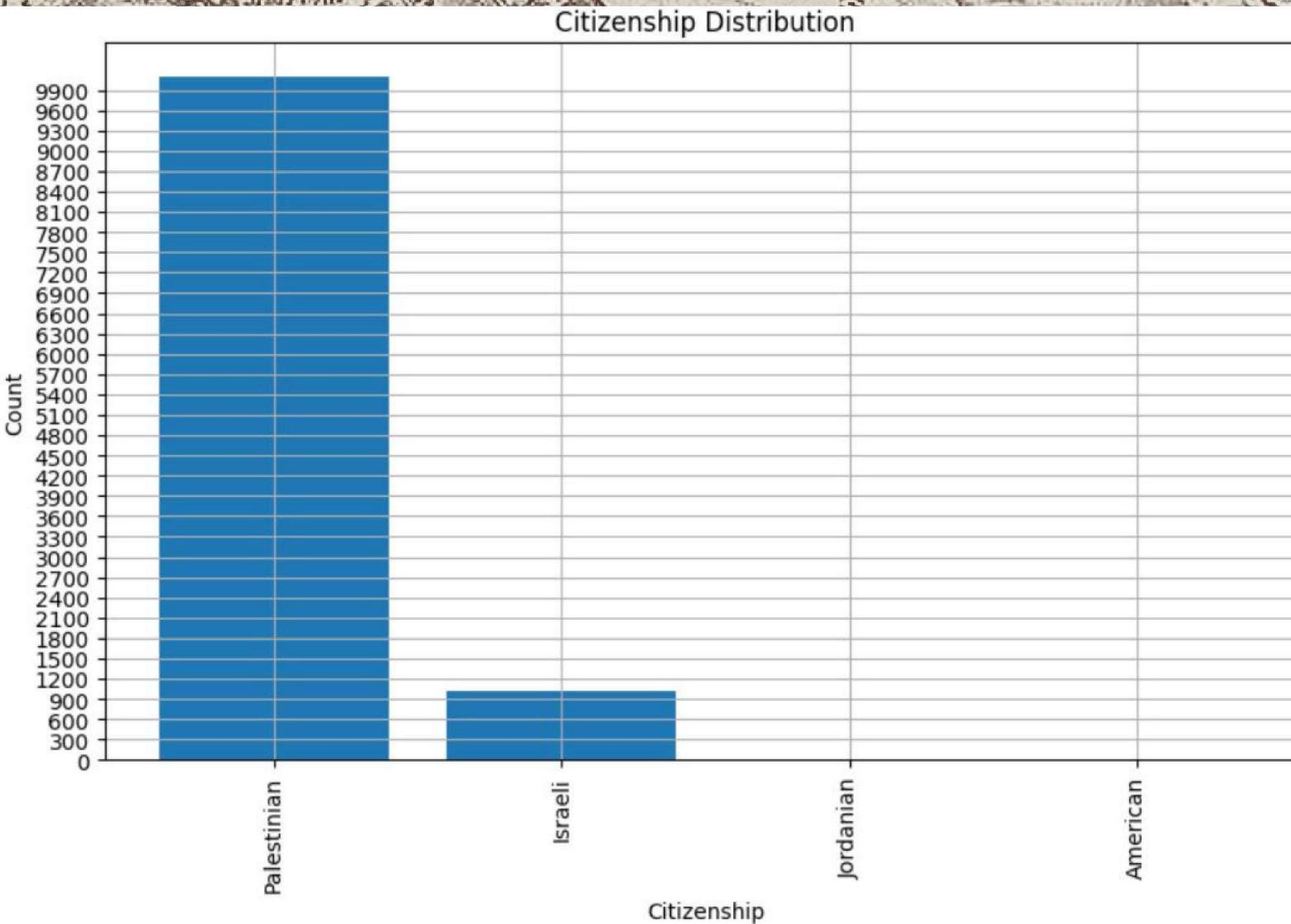
Gender Distribution



- Male casualties constitute approximately 87% of the total war fatalities during this time period
- The heavy representation of male casualties can have societal consequences. It may result in imbalances in communities, affecting family structures and labor.
- This gender disparity highlights the cultural norms and expectations of their culture.



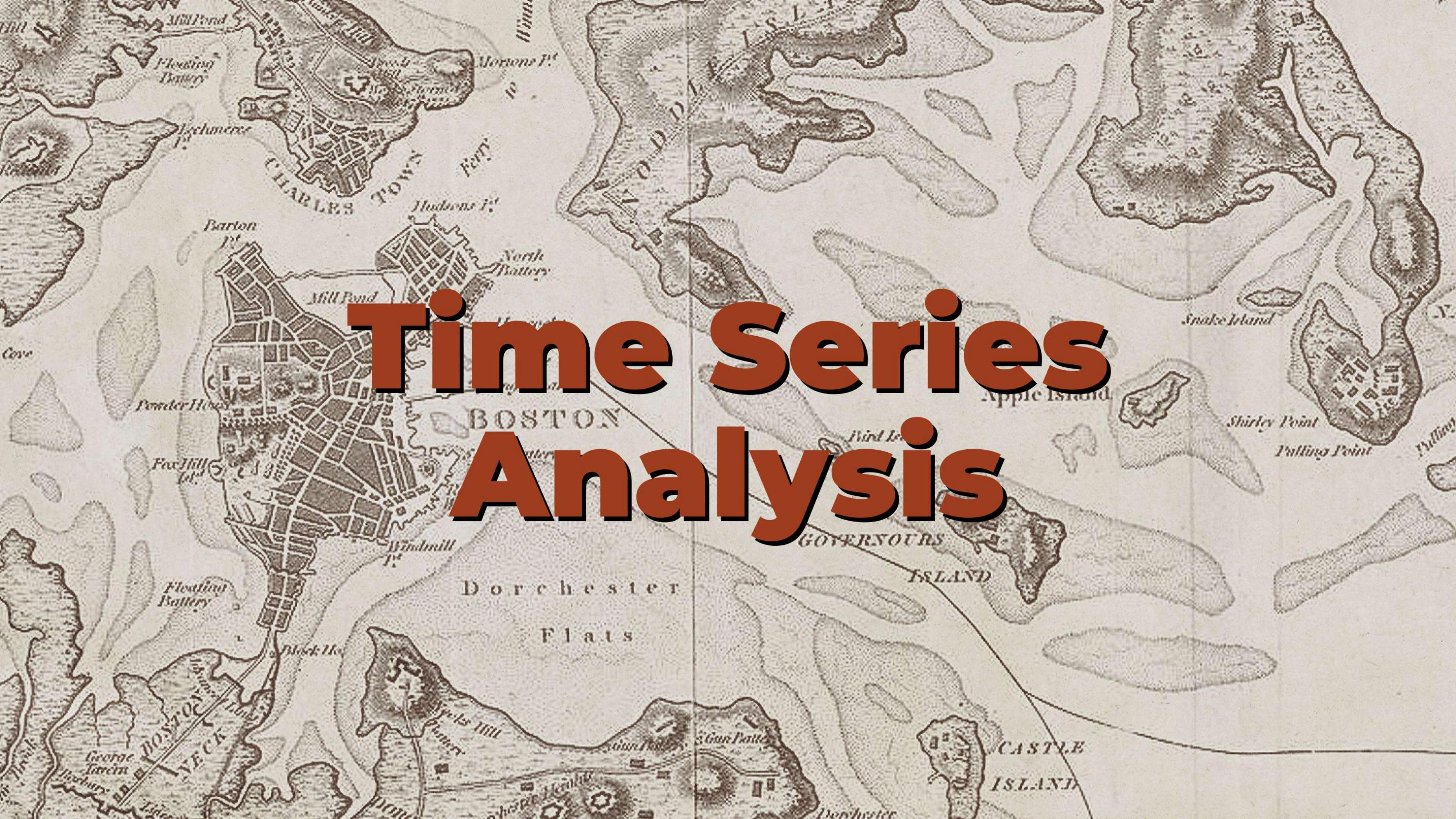
- The highest number of casualties are around the age of 18 to 30 years old, they are the most vulnerable.
- The significant concentration of casualties in this age group leaves the children and elderly helpless, leaving them without caregivers and role models.
- This resulted into a disruption of normal generation progression that affected the passing of values, cultures, and tradition.



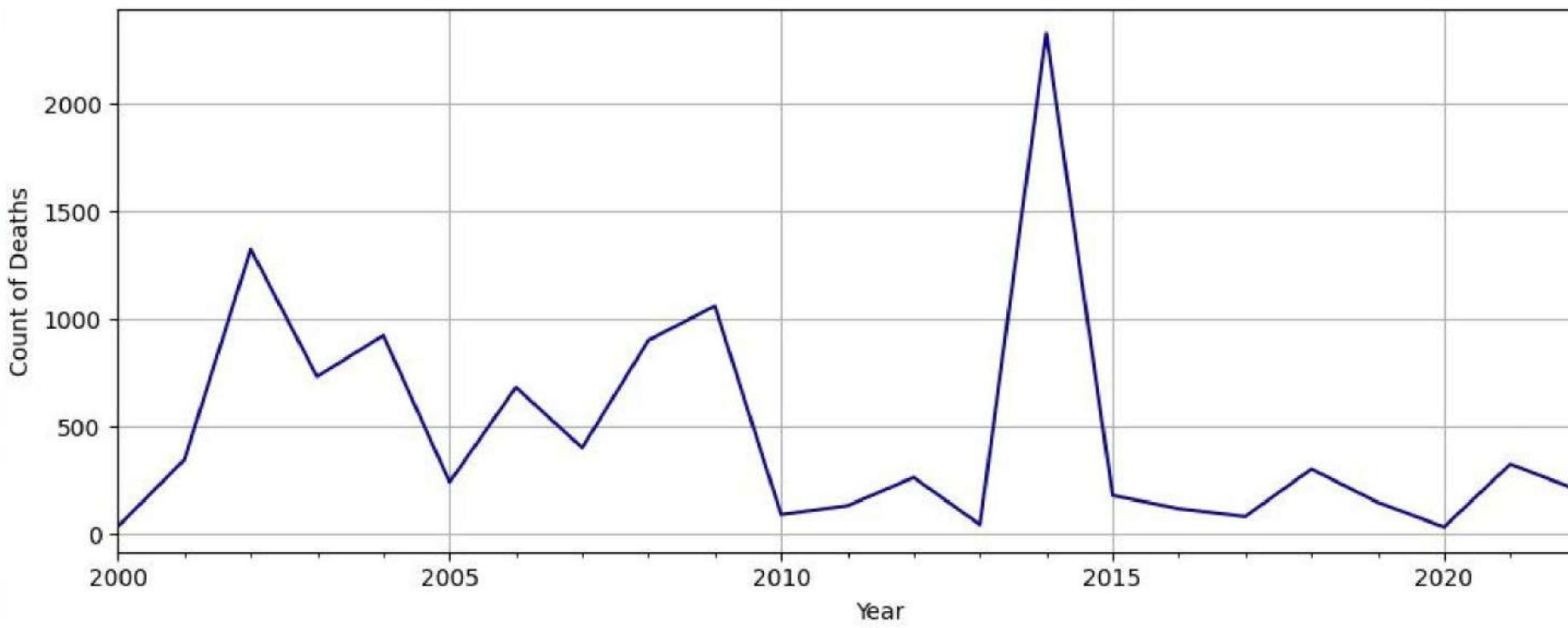
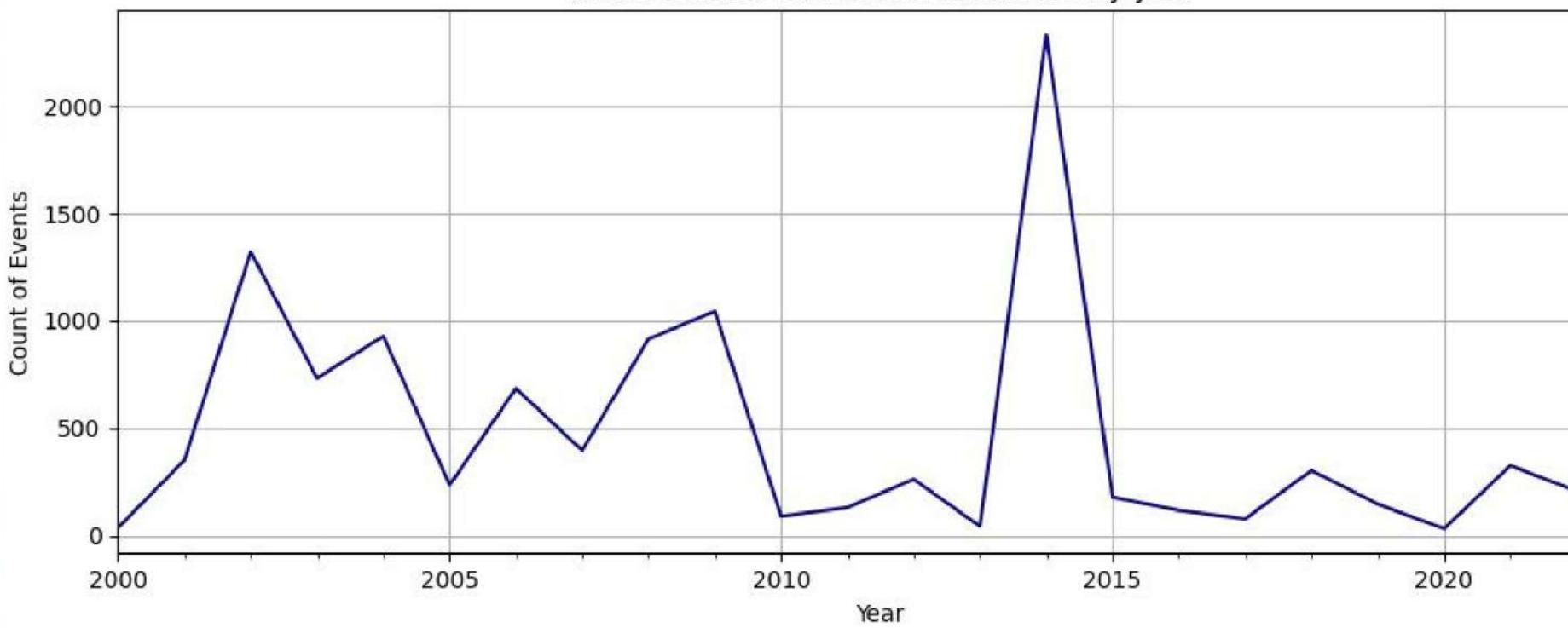
- From 2000 to the present, the Israeli-Palestinian conflict resulted in an estimated 10,000 Palestinian casualties and 1,000 Israeli casualties.
- These striking disparities reveal a significant discrepancy in the suffering experienced by the two sides of the conflict.
- The disparity highlights a humanitarian crisis in the Palestinian territories, including Gaza, Khan Yunis and Rafah.



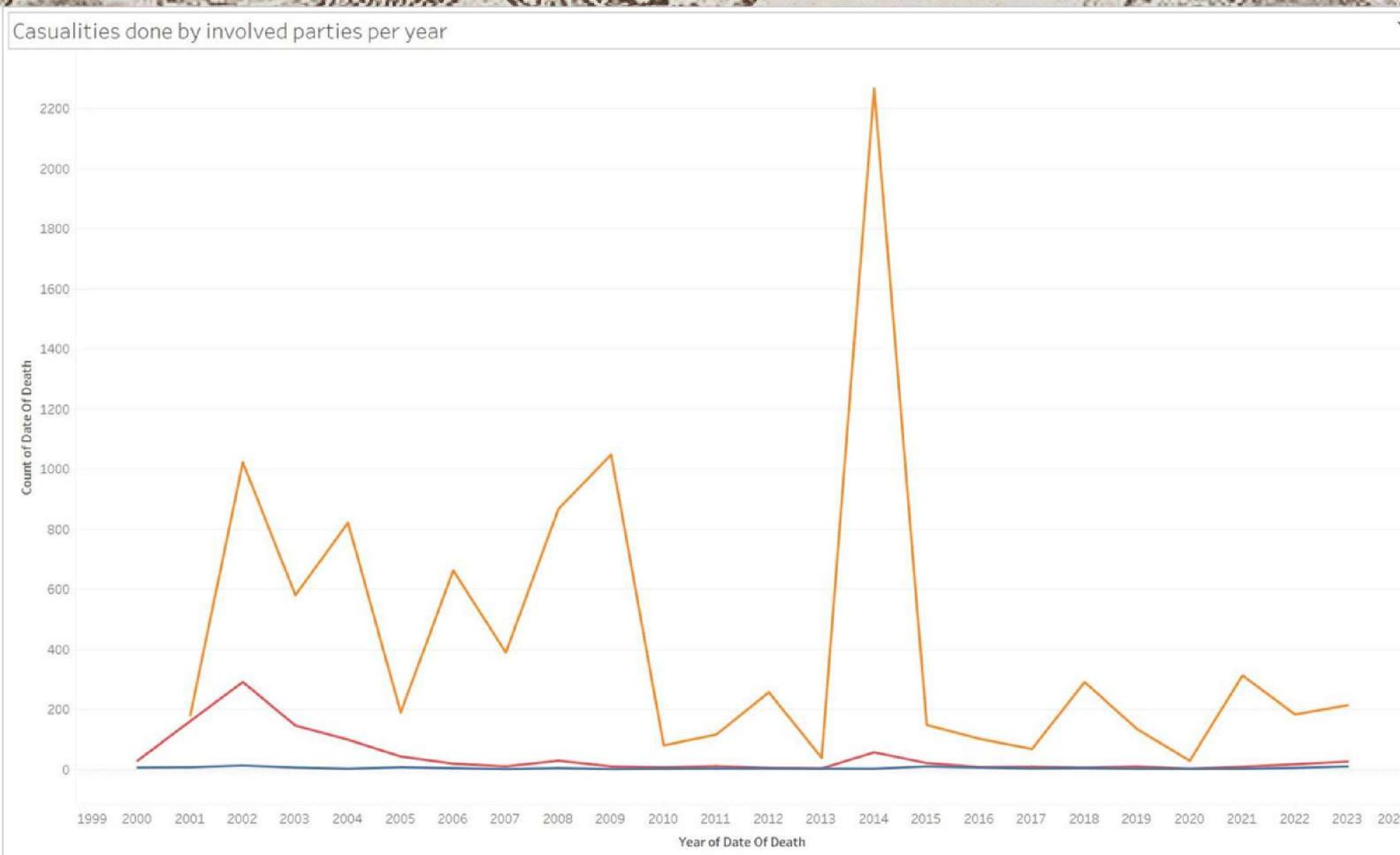
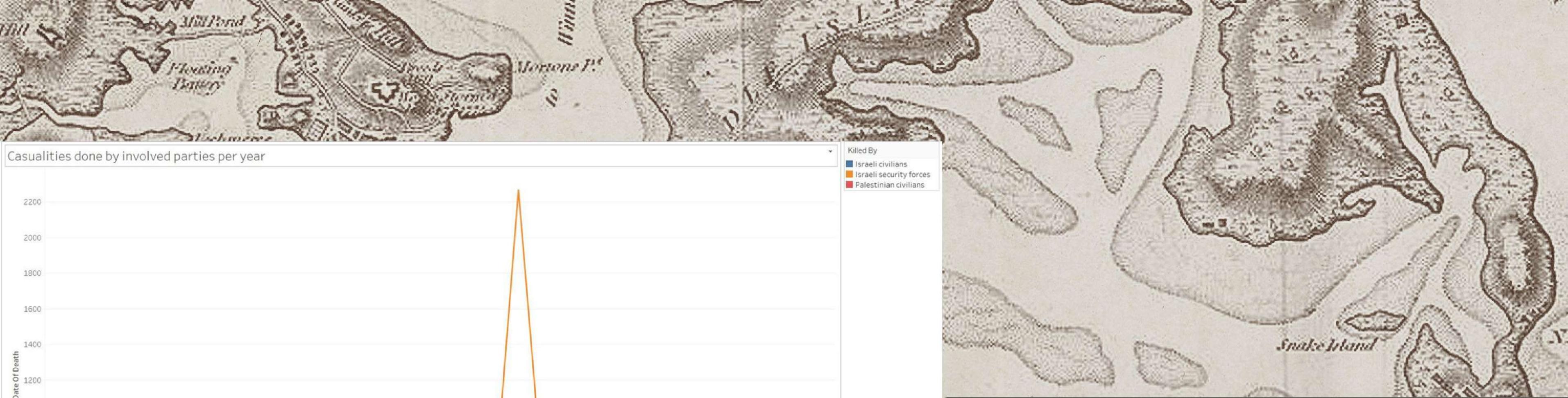
Time Series Analysis



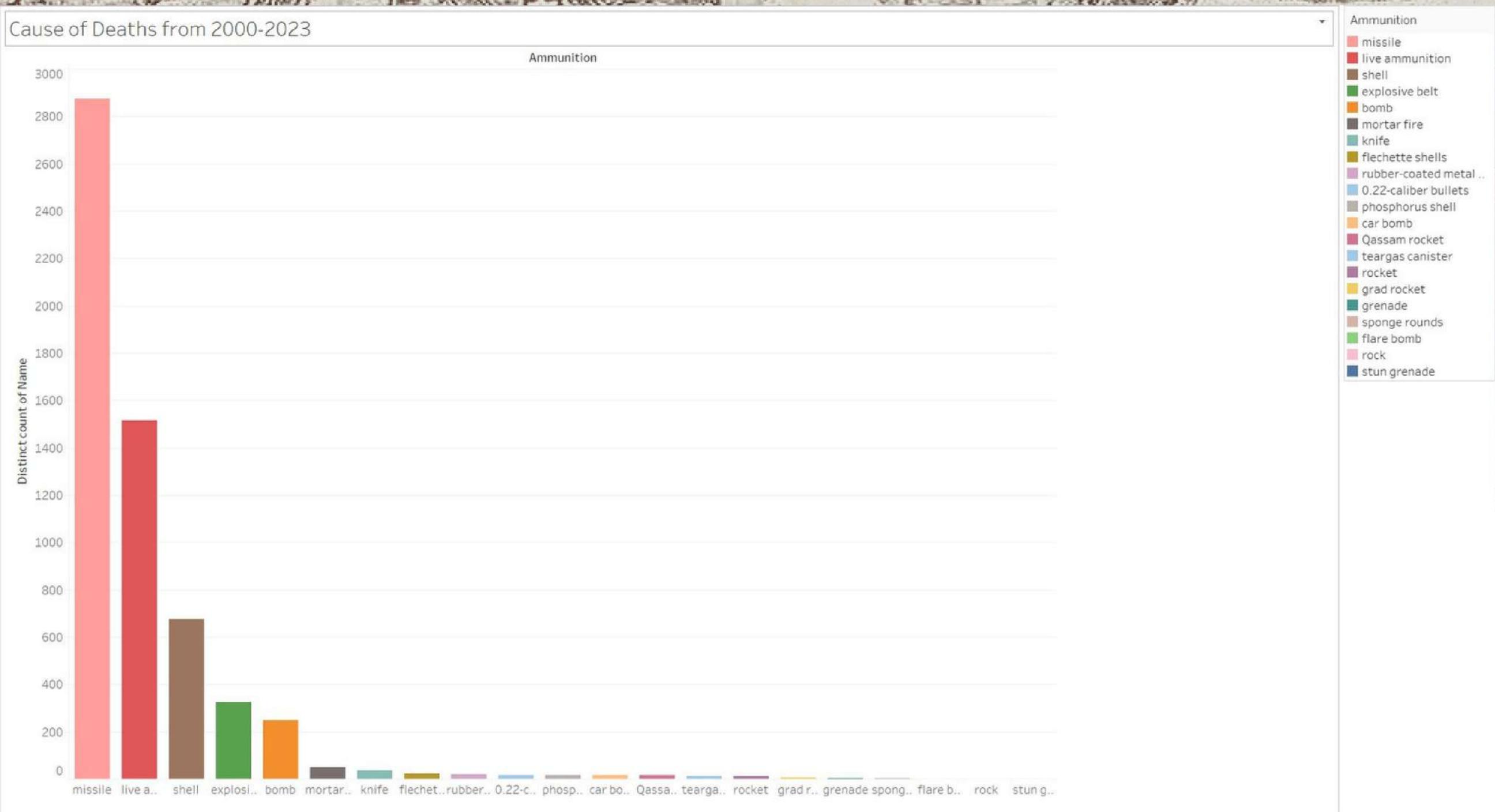
Total recorded Events and Casualties by year



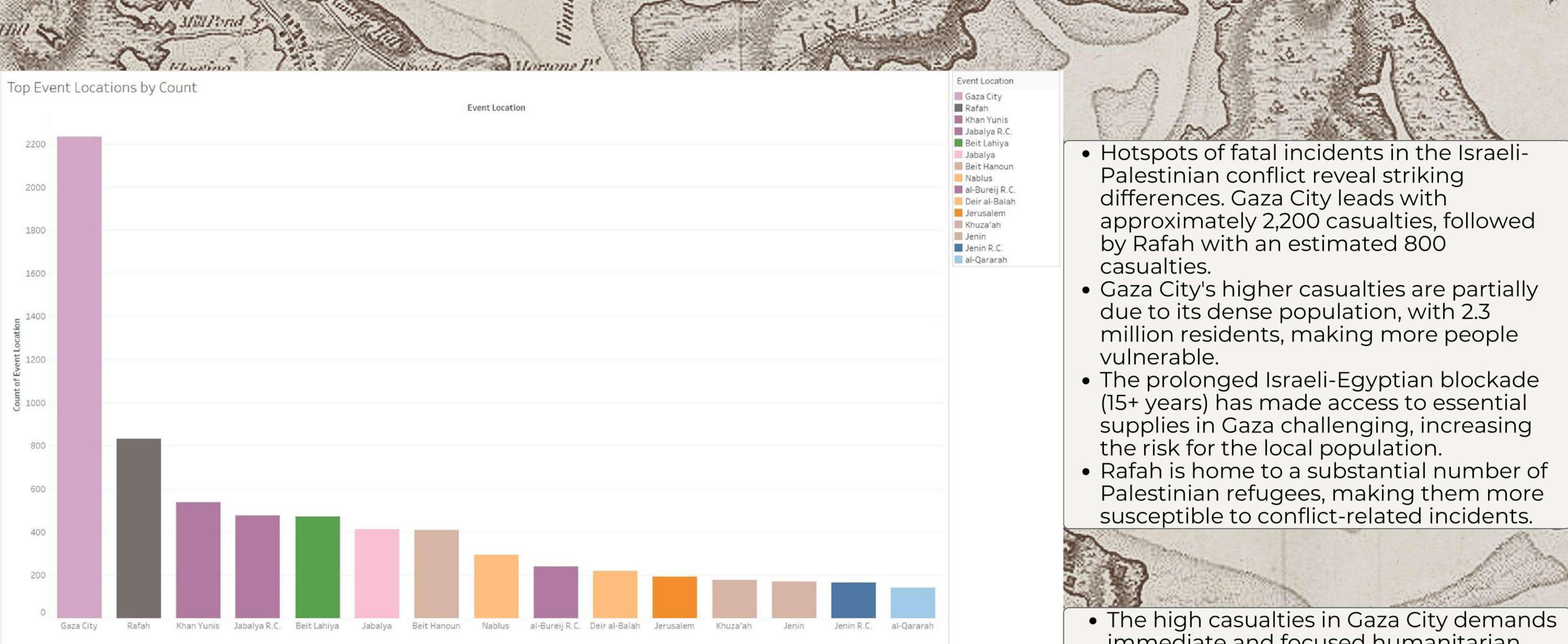
- The "Total Recorded Events and Casualties by Year" reveals significant spikes and dips.
- The highest spike in conflict activity occurred in 2014, coinciding with the Gaza War, followed by the 2009 Gaza War.
- Notably, after each spike in activity, there is a subsequent dip, indicating de-escalation.
- Understanding these patterns is vital for efforts to manage, resolve, and prevent further escalations.
- These spikes call for immediate humanitarian responses during escalations, followed by rebuilding during de-escalation



- This graph highlights a recurring temporal trend with Israeli security forces consistently lead in causing casualties.
- This trend supports that there is indeed a significant casualties on the Palestinian side.
- The consistent involvement of Israeli security forces implies that they have strong defense against the attack of Palestinian civilians.
- The data provides essential insights for policymakers, diplomats, and international organizations to work towards a more balanced and peaceful resolution of the conflict.



- Both parties in the Israeli-Palestinian conflict have employed modern technology, including rockets, airstrikes, and ground invasions.
 - An estimated 2,900 deaths are attributed to missile attacks, followed by 1,500 casualties from live ammunition.
 - Advancement of technology in conflict results in unintended civilian casualties, highlighting the vulnerability of non-combatants.
 - These statistics emphasize the necessity of negotiations and diplomatic efforts to reduce the use of advanced weaponry and protect civilian lives.



- Hotspots of fatal incidents in the Israeli-Palestinian conflict reveal striking differences. Gaza City leads with approximately 2,200 casualties, followed by Rafah with an estimated 800 casualties.
- Gaza City's higher casualties are partially due to its dense population, with 2.3 million residents, making more people vulnerable.
- The prolonged Israeli-Egyptian blockade (15+ years) has made access to essential supplies in Gaza challenging, increasing the risk for the local population.
- Rafah is home to a substantial number of Palestinian refugees, making them more susceptible to conflict-related incidents.

- The high casualties in Gaza City demands immediate and focused humanitarian response, such as medical aid and food supplies.
- The presence of refugees in Rafah highlights the vulnerability of displaced population during a conflict.
- The graph emphasize the importance of international attention, focus and diplomatic efforts in addressing the needs and vulnerabilities in these hotspots.

Recommendation

Future studies should investigate the root causes of temporal trends, specific incidents, and external factors.

Vulnerability of Demographic Groups

- Research should delve into the vulnerability of specific age groups and genders during fatal incidents.
- Understanding how conflict affects different demographics is essential for targeted interventions.

Geographic Factors

- Expanding the analysis to consider socioeconomic conditions and population density can offer a more comprehensive understanding of conflict hotspots.
- Factors beyond casualties, like living conditions, can provide deeper insights into conflict dynamics.

Data Informed Policies

- Policymakers and conflict resolution experts can utilize these insights to create effective strategies for managing and resolving the Israeli-Palestinian conflict.
- Data-driven policies can lead to more targeted and impactful interventions in the casualty hotspots.

Transparency and Collaboration

- Ensure data remains transparent and accessible for future research.
- Collaborative efforts to maintain comprehensive datasets on conflict incidents will deepen our understanding of conflict and trends.



References

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