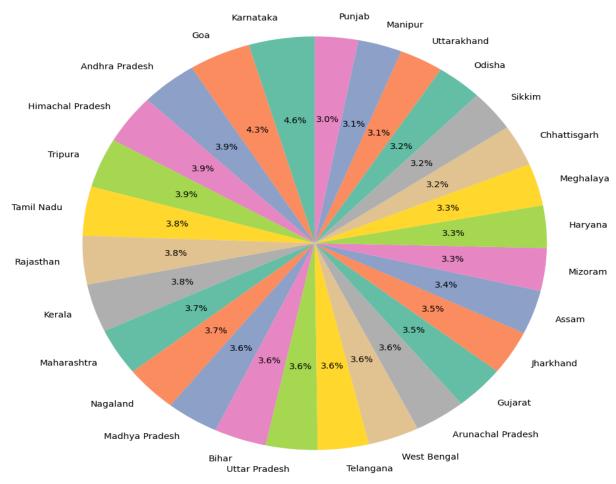
❖ Overall Dataset Analysis.

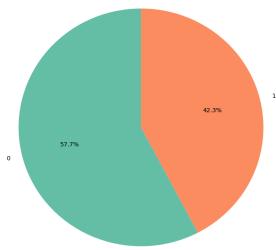
This pie chart represents the percentage distribution of people who participated in a vaccination drive across various states in India. Here are some insights:



- 1. **Karnataka** has the highest participation rate at **4.6**%.
- 2. Goa follows with 4.3% participation.
- 3. **Tripura** and **Himachal Pradesh** both have a participation rate of **3.9**%.
- 4. **Tamil Nadu, Kerala** and **Rajasthan** also show notable participation at **3.8%** each.
- 5. **Maharashtra** follows closely with **3.7%**, while **Madhya Pradesh** and **Bihar** each stand at **3.6%**.
- 6. States like **Uttarakhand**, **Manipur**, and **Punjab** have lower participation rates, with **Uttarakhand** at **3.1%** and **Punjab** at **3.0%**.

The chart shows that participation is relatively evenly spread across most states, with no extreme differences, though **Karnataka** lead slightly.

This pie chart represents the percentage distribution of vaccinated and unvaccinated individuals in the dataset:

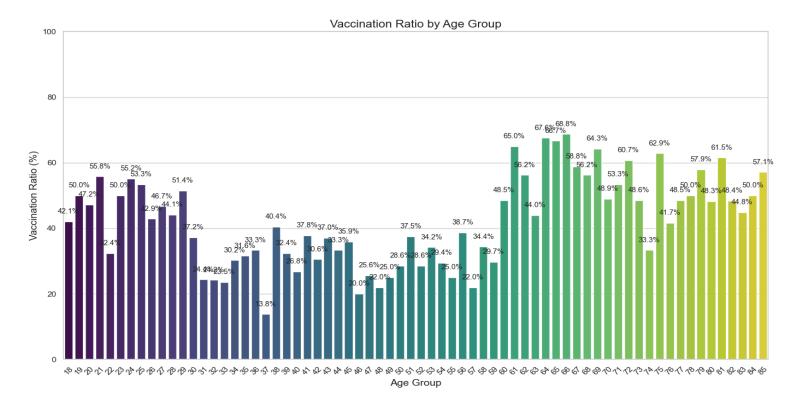


- 57.7% of people in the dataset are unvaccinated, represented by the section labeled "0."
- 42.3% of people in the dataset are vaccinated, represented by the section labeled "1."

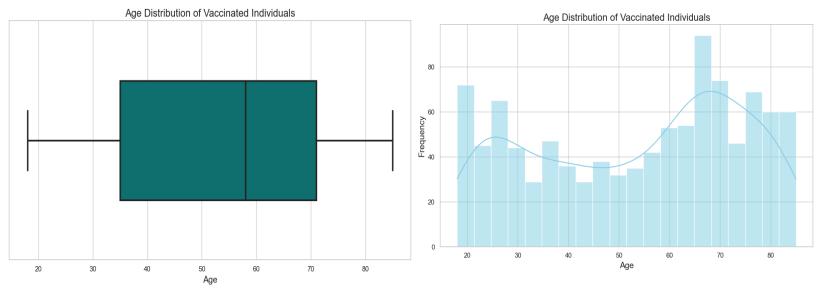
This indicates that a majority of individuals in this dataset have not been vaccinated, with a notable proportion still remaining unvaccinated.

Age-Based Trends In Vaccination Participation

The chart shows vaccination rates by age group, highlighting varying participation across demographics.



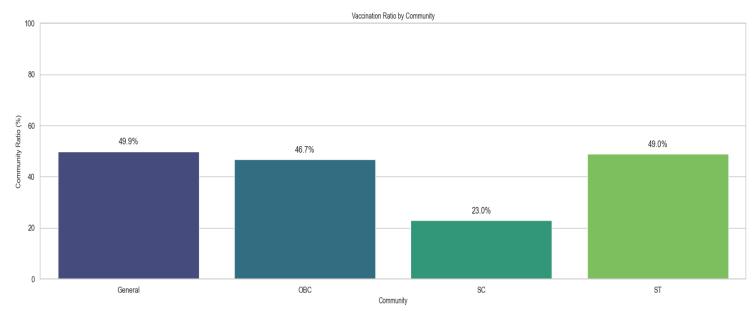
- 1. **Younger Adults (18-30)**: Vaccination rates fluctuate, with peaks around 50-55% for ages 19-24, but a general drop-off by age 28.
- 2. **Middle Age (31-50)**: This group has lower rates overall, mostly staying below 40%, with some ages, like 36, dipping to around 13.8%.
- 3. **Older Adults (51-65)**: Rates increase significantly, reaching over 65% by ages 56-60, indicating strong participation in this age range.
- 4. **Seniors (65+)**: High participation continues with rates staying above 50%, peaking at 68.8% around ages 66-68.



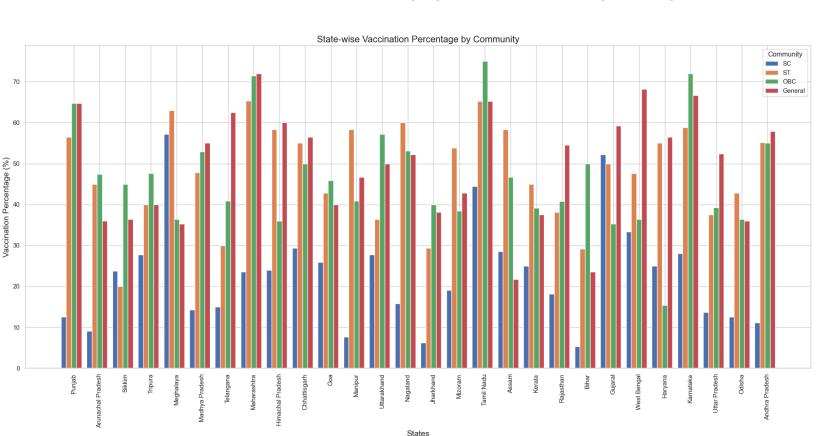
- 1. **Main Age Group**: The median age of vaccinated people is around 55, so middle-aged adults make up a big portion of the vaccinated population.
- 2. **Wide Participation**: People of all ages from 18 to 85 are getting vaccinated, showing that the vaccination program reaches almost the full adult age spectrum.
- 3. Most Common Ages: Middle-aged and older adults are the core group for vaccinations
- 4. **Even Spread**: The ages are pretty balanced around the middle, so participation is consistent across different ages without a strong tilt toward younger or older people.

Overall, vaccination rates rise with age, with the highest participation among those aged 56-68, while middle-aged adults (31-50) show the lowest rates.

* Community-Wise Vaccination Participation Rates



- 1. **Highest Participation**: The "General" community has the highest vaccination rate at 49.9%, closely followed by the "ST" (Scheduled Tribes) community with a rate of 49.0%.
- Moderate Participation: The "OBC" (Other Backward Classes) community has a vaccination rate of 46.7%, which is close to the rates of the General and ST communities.
- 3. **Lowest Participation**: The "SC" (Scheduled Castes) community shows a significantly lower vaccination rate of 23.0%, indicating a gap in vaccination coverage for this group.



- For the General community, states like Tamil Nadu, Karnatak, and Maharastra have the highest rates.
- For OBC, the trend is similar, with these states showing strong vaccination rates.
- For the SC and ST communities, while these states also perform better, the percentage remains lower compared to the General and OBC groups in those regions.

Gender-Wise Vaccination Participation Rates

