

As India prepares for pandemic situation increasing genomic sequencing and use of scientific evidence for decision making are essential. explain (200 words)

As India is approaching towards third wave of pandemic increase in genome sequencing and use of data in decision making gains importance. These two steps have proved their potential in helping western countries like USA, Britain in predicting the waves, vaccine efficacy and strategising measures in better way.

Importance of genome sequencing

(i) prediction of future waves

- US, UK were able to predict waves by studying and sequencing Delta variant's characteristics like susceptibility, transmission capacity etc.

(ii) tracking vaccine efficacy

- It can indicate the immune efficiency against different variants

Eg: pfizer vaccine was found to be ~~be~~ less effective in delta variant than alpha variant.

Importance of Data driven approach

The western countries followed a data driven approach and disseminated the information among public quickly, made people aware about vulnerability of particular wave (ie strain of virus)

Need of hour

Though government has taken steps like INSCOG Consortium for genome sequencing, it could only sequence 1% where 5% of patients are required. The data dissemination among public is slow and delayed. There are need to be speeded up

Thus Government understanding importance of these areas should → speed up genome sequencings
→ Speed up vaccine effectiveness research
→ engage district based operations in sequencing
→ timely and transparent data sharing to public