

Repurposed Drugs

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In news

Recently, WHO states that repurposed drugs did not cut down mortality due to COVID-19

What is it?

- Drug repurposing (profiling) is a strategy for identifying new uses for approved or investigational drugs that are outside the scope of the original medical indication
- This strategy offers various advantages over developing an entirely new drug for a given indication
- **Drug repositioning is a “universal strategy” for neglected diseases due to**
 - **Reduced number of required clinical trial steps** could reduce the time and costs for the medicine to reach the market
 - Existing pharmaceutical supply chains could facilitate “formulation and distribution” of the drug
 - Known possibility of combining with other drugs could allow more effective treatment,
 - The repositioning could facilitate the discovery of “new mechanisms of action for old drugs and new classes of medicines”
 - The removal of “activation barriers” of early research stages can enable the project to advance rapidly into disease-oriented research.

Some of the examples of repurposed drugs are:

- A number of successes have been achieved, the foremost including sildenafil (Viagra) for erectile dysfunction and pulmonary hypertension and thalidomide for leprosy

and multiple myeloma

- Others are Remdesivir, Hydroxychloroquine, Lopinavir/Ritonavir(not successful)