

# The World's Largest Hepatitis C Screening Program in Egypt

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## BACKGROUND

With the highest prevalence of HCV and 5.5 Million viremic patients, HCV elimination became a national health priority in Egypt. The national HCV treatment program with DAAs began in 2014, and by September 2018, about 2.5 million patients had been evaluated for and started treatment. These represented most patients who had been living with the diagnosis, and by mid 2018, the rate of patients registering for evaluation and treatment markedly decreased.

## METHODS

### Mass screening program

To augment treatment flow and meet disease elimination targets, a national population screening program was initiated in October 2018 aiming at screening:

- all adults above the age of 18 (61 million), and
- all school children between the ages of 12 and 18 if their parents signed a letter of approval (15 million) within two years.

Screening is totally free and includes testing for anti-HCV using WHO pre-qualified rapid diagnostic test (SD Biline HCV, Abbott, Abbott Park, IL, USA), diabetes, hypertension, and obesity.

The country was divided into three geographic sections and the mass screening program is being implemented as follows:

	Phase 1	Phase 2	Phase 3
Governorates, n	9	11	7
Start	October 1 <sup>st</sup> , 2018	December 1 <sup>st</sup> , 2018	March 1 <sup>st</sup> , 2018
Duration, months	2	3	2
Fixed screening sites, n	5,000	6,000	7,000
Millions to be screened, n	17	21	23

**Screening of school children** for anti-HCV is being implemented as follows:

- Scholar year 2018/2019: children 15-18 years old.
- Scholar year 2019/2020: children 12-15 years old.

### Screening sites

- Preparation for each phase includes training ~1000 trainers who train more than 18,000 teams of healthcare workers (physicians, nurses, data entry personnel), and preparing screening sites in many Ministry of Health and Population hospitals, rural health units, schools, sports facilities and youth centers.
- Fixed screening sites work 12-hour days, 7 days a week.
- These screening sites are augmented by specially outfitted vehicles, which target crowds in mosques on Fridays, churches on Sundays, sports clubs, factories, and subway stations.

### Results of screening tests

Results are immediate, and data are transmitted instantaneously to a central database through handheld devices and cellular networks.

### HCV-seropositive individuals

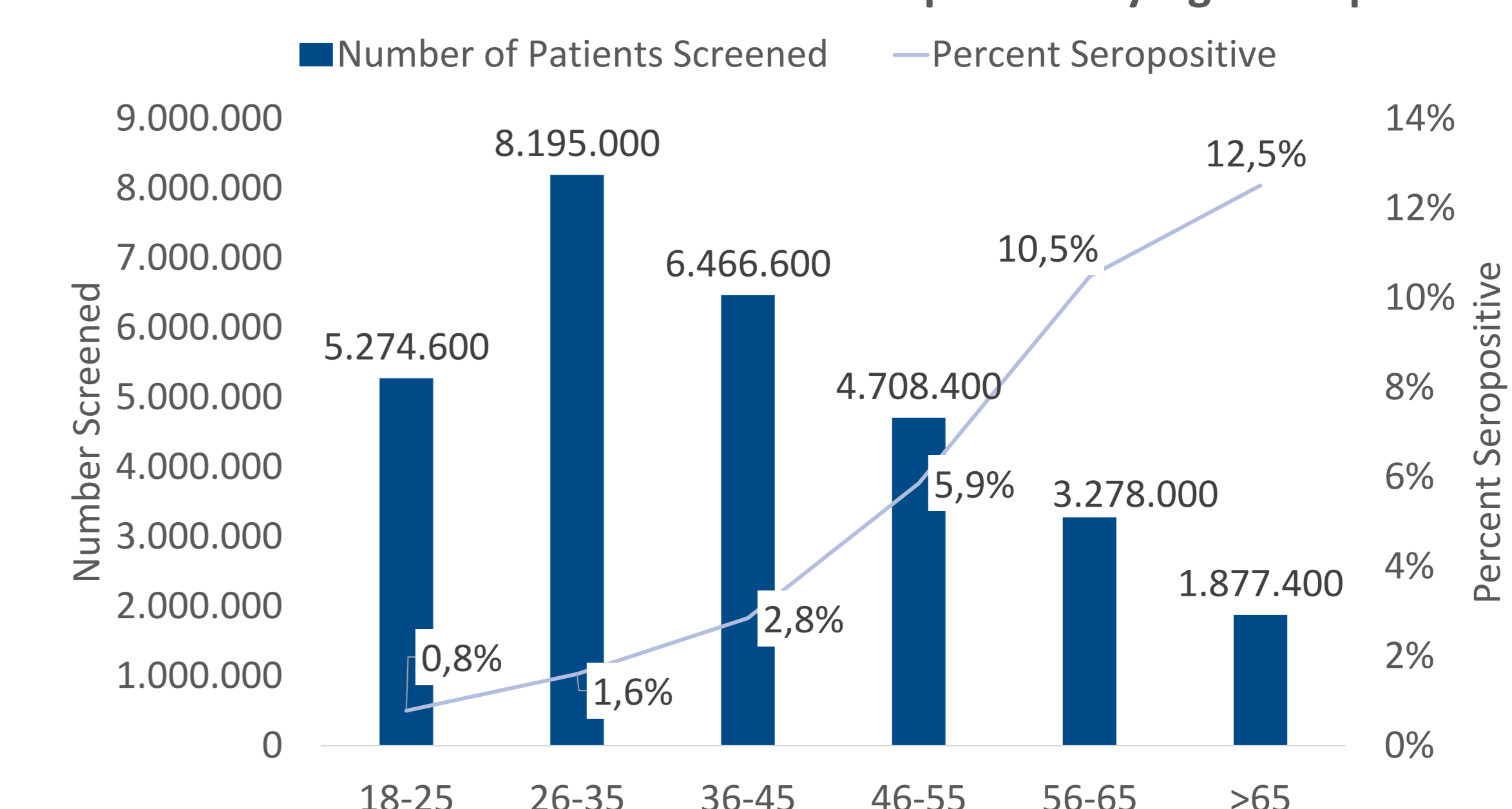
- Appointments are set for HCV seropositive individuals through the web-based registration system at a treatment center nearest to their residence, where further evaluation and treatment are free at the expense of the state.
- The cost of 12 weeks' treatment with locally produced generics was negotiated down to US\$ 45.
- The expenses of the evaluation and treatment are totally covered by the state.

## RESULTS

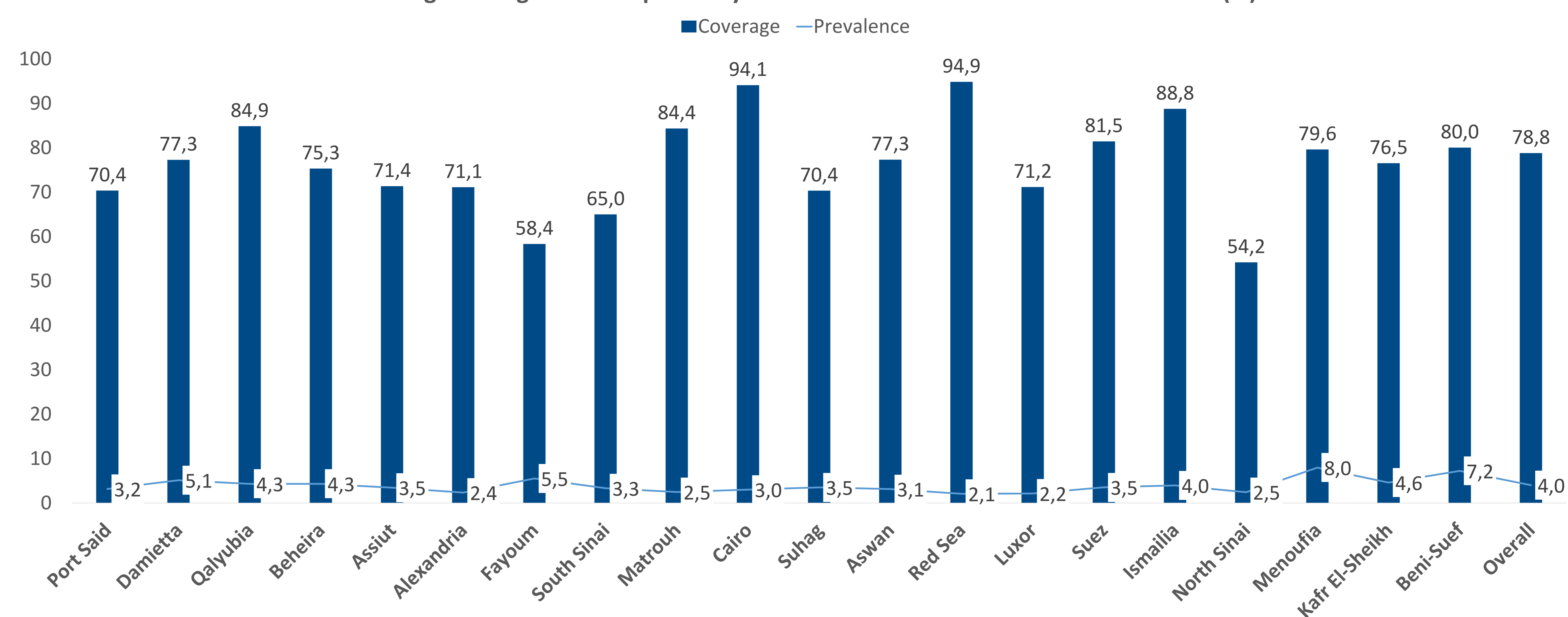
In the first 4.5 months of the program, turnout was massive:

- 29.8 Million persons were screened (78.5% of the target population in the areas where screening is still ongoing).
- Of these, 1.2 million were seropositive (4%), were referred for further evaluation, of whom 75% were viremic.
- Those who test positive and fail to show for their evaluation appointments are contacted to identify the cause of the "no show".

Number Screened and Percent Seropositive by Age Group



Screening Coverage and Seropositivity in the Governorates of the First Two Phases (%)



## CONCLUSION

With this screening program and the mass treatment effort that has been the largest in the world so far, Egypt is on a fast track to HCV elimination, and has the potential to be the first country to achieve the WHO disease elimination targets.

## ACKNOWLEDGMENT

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## CONTACT

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