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Medical students for health-care staff shortages during the COVID-19 pandemic

Faced with medical health-care staff shortages as a result of the coronavirus disease 2019 pandemic in Denmark,¹ colleagues at Aalborg University and Aalborg University Hospital were able to shift teaching of medical students to a digital platform, employ final year students as temporary residents, and plan and initiate course programmes in ventilator therapy assistance and nursing assistance within 2 days.

On March 11, 2020, the Danish Prime Minister called for the mobilisation

of all medical staff.² Most universities in the country cancelled lectures and barred buildings. In response to the call to mobilise all medical staff, we decided to keep medical students in their clinical placements and to initiate fast-track courses in ventilator therapy and nursing assistance. In accordance with our undergraduate medical curriculum, we included the courses and the work as a temporary resident, ventilator therapy assistant, or nursing assistant in the teaching programme.

Teaching was shifted to digital solutions, and the unique learning opportunity arising from the pandemic emergency health-care work matched the learning objectives in our undergraduate medical curriculum.³

We constructed a new portfolio to be completed by each student to demonstrate learning activities in courses, clinical placements, and pandemic work. This will be used to emphasise the commitment of medical students to the pandemic emergency health-care workforce and to support progression in medical education at this summer's examinations.

Within 2 weeks, all master's students had volunteered, and almost two thirds of students (161 of 257) were working as temporary residents (76 [47%] of 161), ventilator therapy assistants (45 [28%]), or nursing assistants (30 [19%]). More than 70% of bachelor students (329 of 454) had volunteered within 1 week, and



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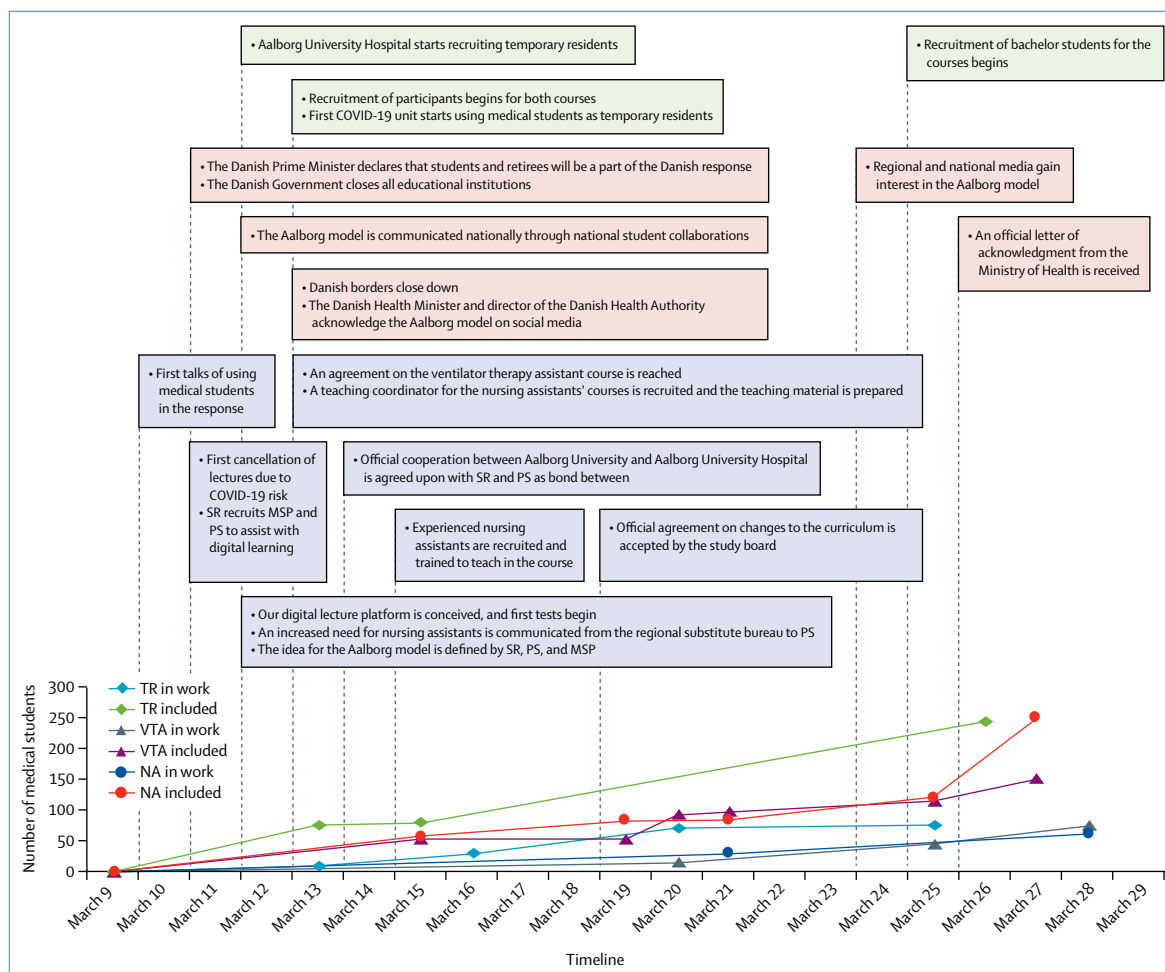


Figure: The inclusion, preparation, and employment of medical students at Aalborg University
COVID-19=coronavirus disease 2019. NA=nursing assistants. TR=temporary residents. VTA=ventilator therapy assistants.

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31% (142 students) were working in nine pandemic emergency departments.

The processes driving this initiative are illustrated in the figure, and the achievements were acknowledged by the Danish Ministers of Health and Education and the Danish Health Authority. Decisive support from the heads of both Aalborg University and Aalborg University Hospital facilitated the process, which was led by the heads of the medical master's programme in medicine (SR, JE, and SA) together with the heads of the medical students' organisations (PS and MSP).

This immediate response to the call for pandemic emergency health-care staff by medical students, without delay to their medical education, follows a historical trend³ and sets an example, we believe, to be followed by other universities. The support by organisations and close collaboration was key to our success (figure). There is no need to hesitate—medical students are needed just as urgently as ventilators.^{4,5}

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