Infektionshygiejne og bæredygtighed – modsætninger eller en fælles sag?

Hanne Hvingelby,
Hygiejnesygeplejerske,
Master i Sundhedsantropologi

Citater fra hverdagen

”I infektionshygiejne er I optaget af at redde den enkelte patient – mens i bæredygtighed er vi optaget af at redde kloden”

Citater fra hverdagen

"Ja, jeg bruger mange handsker. Faktisk tror jeg aldrig jeg rører ved en patient uden!"

"Jeg har været sygeplejerske i mere end 30 år – og ingen skal blande sig i hvor mange handsker jeg bruger. (...)Og handsker hører til hvor der er sandsynlighed for patientkontakt."

Hvorfor skal infektionshygiejne interessere sig for bæredygtighed –

nature climate change

ANALYSIS

https://doi.org/10.1038/s41558-022-01426-1

Check for updates

Over half of known human pathogenic diseases can be aggravated by climate change

Camilo Mora[1]✉, Tristan McKenzie[2,3], Isabella M. Gaw[4], Jacqueline M. Dean[1], Hannah von Hammerstein[1], Tabatha A. Knudson[1], Renee O. Setter[1], Charlotte Z. Smith[5], Kira M. Webster[1], Jonathan A. Patz[6] and Erik C. Franklin[1,7]

It is relatively well accepted that climate change can affect human pathogenic diseases; however, the full extent of this risk remains poorly quantified. Here we carried out a systematic search for empirical examples about the impacts of ten climatic hazards sensitive to greenhouse gas (GHG) emissions on each known human pathogenic disease. We found that 58% (that is, 218 out of 375) of infectious diseases confronted by humanity worldwide have been at some point aggravated by climatic hazards; 16% were at times diminished. Empirical cases revealed 1,006 unique pathways in which climatic hazards, via different transmission types, led to pathogenic diseases. The human pathogenic diseases and transmission pathways aggravated by climatic hazards are too numerous for comprehensive societal adaptations, highlighting the urgent need to work at the source of the problem: reducing GHG emissions.

The ongoing emission of greenhouse gases (GHGs) is intensifying numerous climatic hazards of the Earth's climate system, which in turn can exacerbate human pathogenic diseases[1]. The societal disruption caused by pathogenic diseases, as clearly revealed by the COVID-19 pandemic, provides worrisome glimpses into the potential consequences of looming health crises driven by climate change[2–6]. While the conclusion that climate change can affect pathogenic diseases is relatively well accepted[2–6], the extent of human vulnerability to pathogenic diseases affected by climate change is not yet fully quantified. On one hand, it is increasingly recognized that the emission of GHGs has consequences on a multitude of climatic hazards of the Earth's system (for example, warming, heatwaves, droughts, wildfires, extreme precipitation, floods, sea level rise and so on; Fig. 1)[6,7]. On the other hand, there is a broad to pathogenic diseases. In this paper, we attempt to fill this gap by applying a systematic approach to screen the literature for the set of interactions in which climatic hazards have been linked to human pathogenic diseases.

Search strategy and selection criteria

We carried out three complementary literature searches (Fig. 2) to find case examples of pathogenic diseases affected by climatic hazards. For the first search, we performed independent queries for each combination of the keyword 'disease' with each of ten climatic hazards known to be sensitive to GHG emissions (Fig. 1). For the second search, we carried out independent queries for scientific papers combining each disease name listed in two authoritative databases of infectious diseases (Supplementary Table 1) with

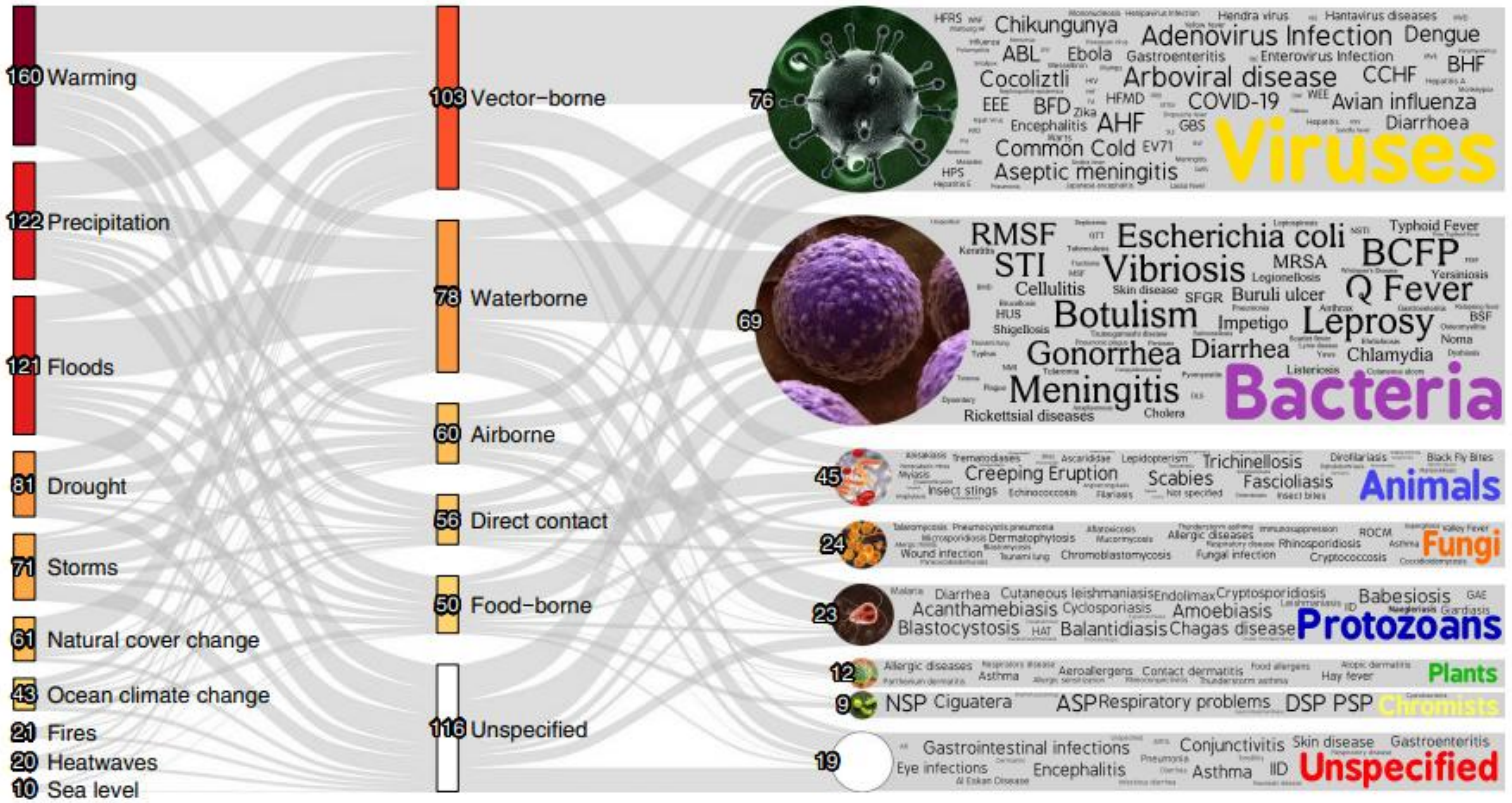


Fig. 3 | Pathogenic diseases aggravated by climatic hazards. Here we display the pathways in which climatic hazards, via specific transmission types, result in the aggravation of specific pathogenic diseases. The thickness of the lines is proportional to the number of unique pathogenic diseases. The colour gradient indicates the proportional quantity of diseases, with darker colours representing larger quantities and lighter colours representing fewer. Numbers at each node are indicative of the number of unique pathogenic diseases (caveats in Supplementary Information 1). An interactive display of the pathways and the underlying data are available at https://camilo-mora.github.io/Diseases/. Several disease names were abbreviated to optimize the use of space in the figure; their extended names are provided in Supplementary Table 1. Credits: word clouds, WordArt.com; bacteria, Wikimedia Commons (www.scientificanimations.com); other images, istockphoto.

Nordiske kriterier for mere bæredygtig emballage

19.04.2022

Nye miljøkriterier skal få leverandører til sundhedsvæsnet til at bruge mindre mængder emballage til gavn for miljø og klima. Kriterierne for mere bæredygtig emballage er udviklet af regionerne i samarbejde med indkøbsorganisationer på sundhedsområdet i en lang række nordiske lande.

Leverancer til sundhedsvæsenet ledsages af store mængder emballage. Emballage beskytter, men udgør samtidig en kompleks og omfattende type affald for sundhedsvæsenet, som belaster miljø og klima. I arbejdet for at reducere den belastning har regionerne derfor udviklet en række nordiske kriterier for mere bæredygtig emballage til produkter til sundhedssektoren.

Kriterierne er udviklet i tæt samarbejde med indkøbsorganisationer på sundhedsområdet i de nordiske lande. De skal indarbejdes som (frivillige) krav til marked og leverandører i forbindelse med relevante udbud, når regionerne fremover køber produkter og varer ind til hospitalerne. Kriterierne skal:

- Reducere materialeforbruget
- Øge genanvendelsen
- Øge anvendelsen af genanvendte eller fornybare materialer

Kriterierne er udviklet for at mindske klima- og miljøpåvirkningerne fra emballage, der anvendes

Læs hvordan de gjorde i denne udgave af 'Vores verden – vores ansvar'-nyhedsbrevet. Her kan du også blive klogere på, hvordan vores gamle computere og andet elektronik bliver genbrugt og genanvendt.

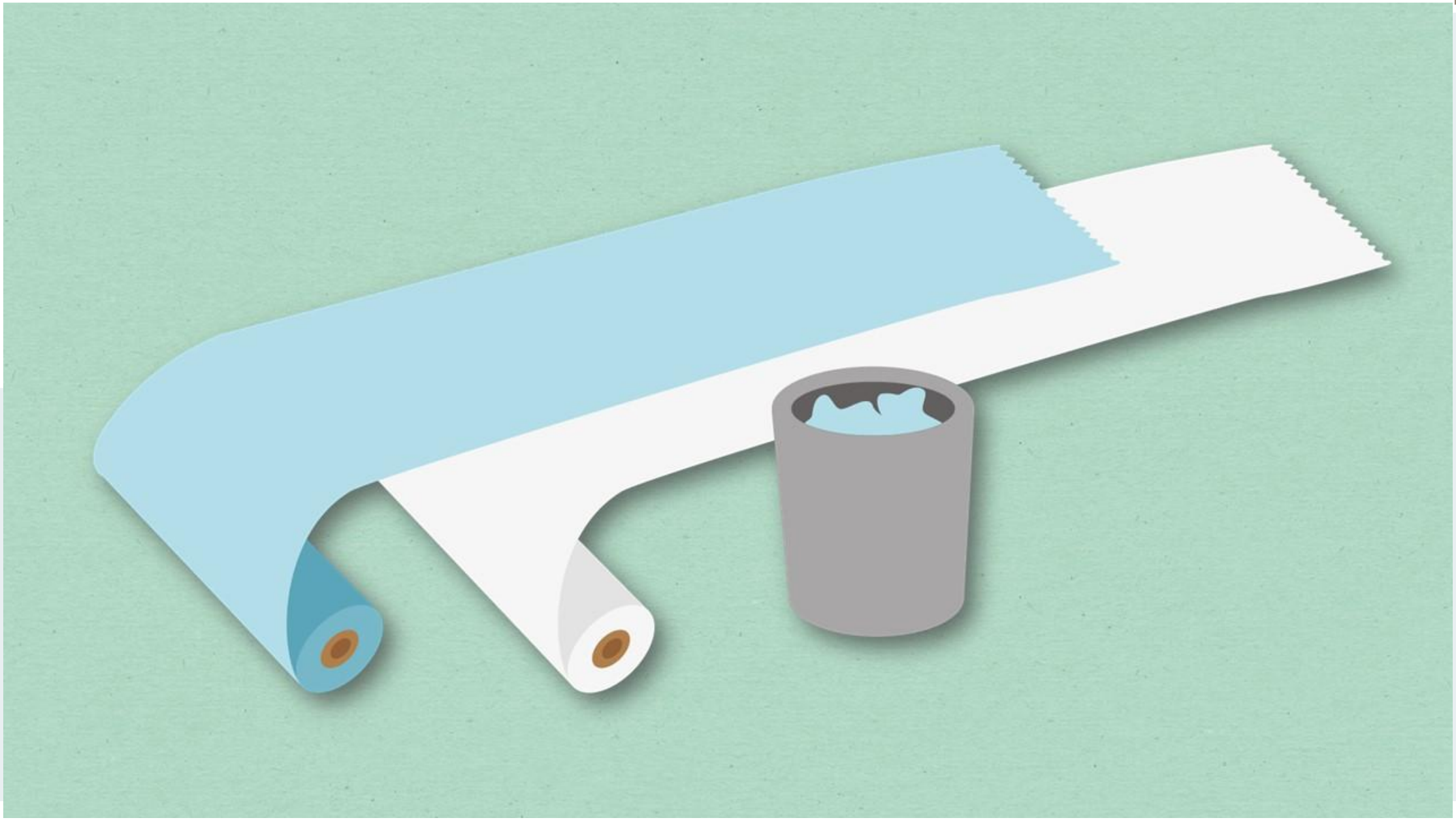
Mindre affald: Skær ned på afdækning ved små operationer

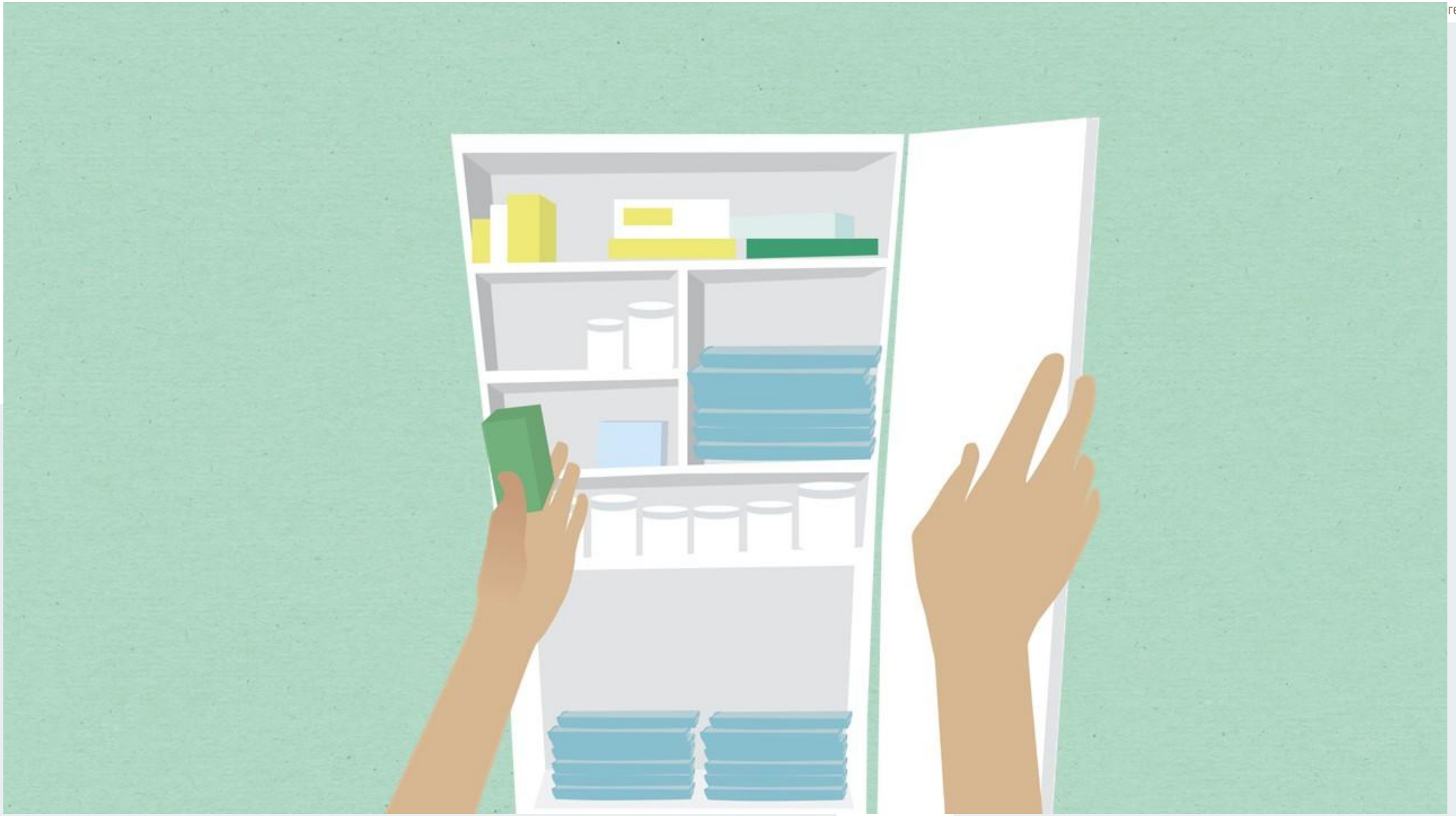
Lille operation = Mindre affald. Sådan lyder overskriften fra Regionshospitalet Gødstrup på et vellykket projekt, der let kan kopieres til andre hospitaler.

Ortopædkirurgien har blandt andet flyttet små håndoperationer fra en operationstue til ambulatoriet. Og det kan ses på affaldsmængderne!

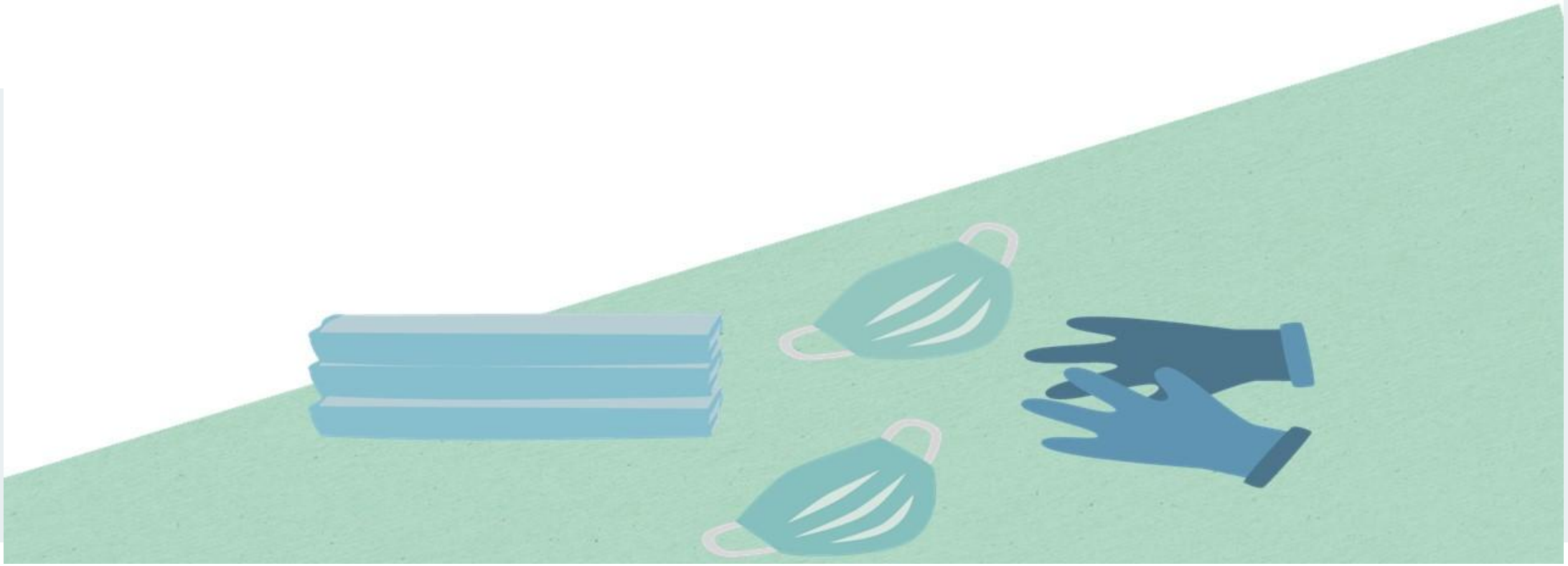
Læs mere

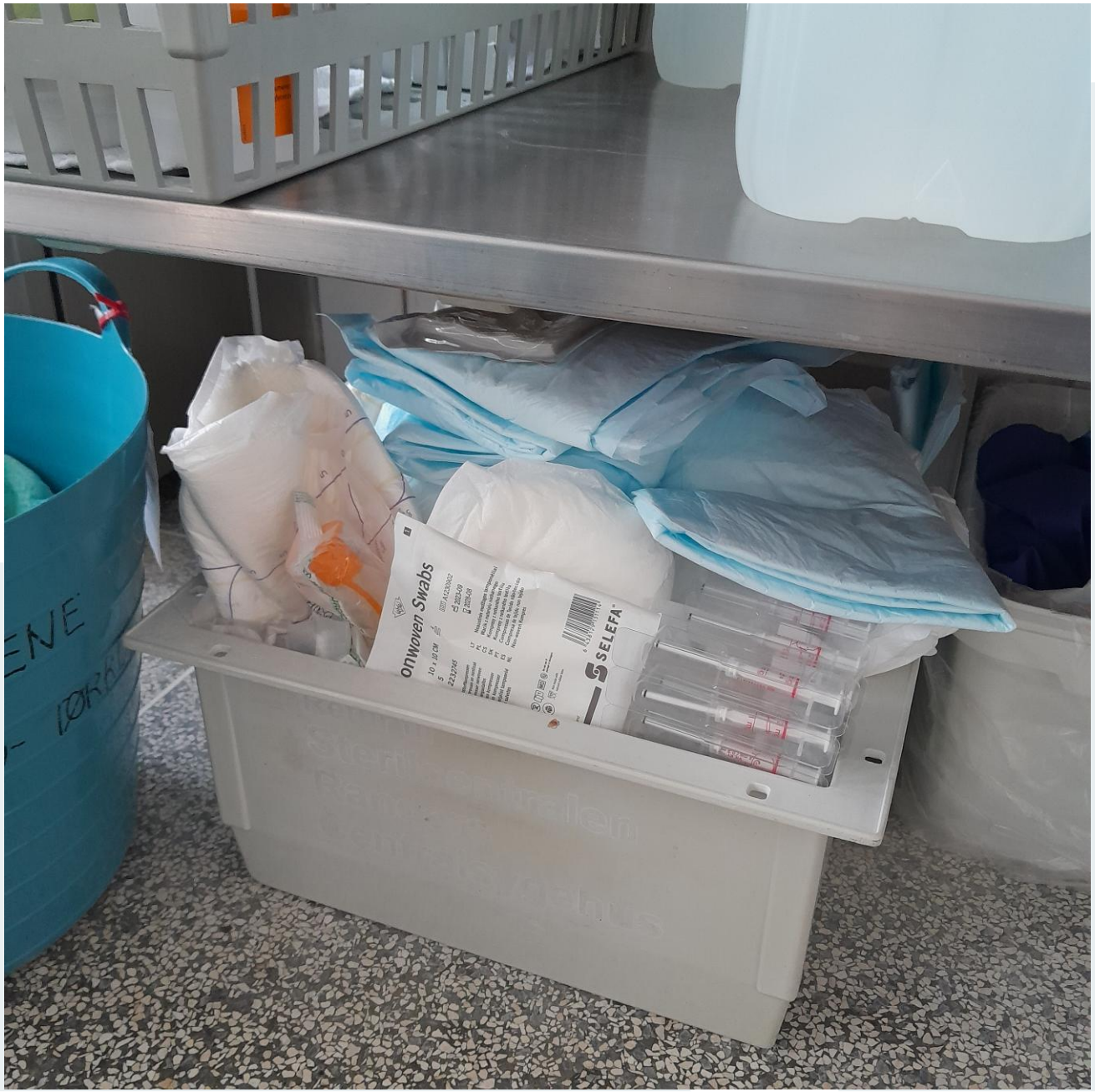
Samarbejde og fælles sager






BD
VYGON
Lact aid
Lact aid
Kig op
inden du
bestiller
sprøjter




Onwoven Swabs
SELEFA

Mange projekter – små og store…

- Metalinstrumenter – fra engangs- til flergangs-
- Anæstesimasker
- Ventilation på OP stuer
- Flergangstekstiler – til isolation og til OP
- Respiratorslanger
- vaskeklude, krus, nyrebakker, ampulknækkere etc. etc.

Hvorfor skal bæredygtighedsorganisationerne interessere sig for infektionsforebyggelse?

Nytænkning har fået bugt med urinvejsinfektionerne

Selvom urinvejsinfektioner ofte kan forebygges, er de en hyppig årsag til overbehandling med antibiotika blandt ældre patienter. På Plejecenter Ågården har man imidlertid taget skeen i den anden hånd for at komme problemet til livs og har udviklet en ny arbejdsgang, der har givet mærkbare resultater.

Sygeplejersken 2019 nr. 9, s. 44-45

Af: **Helle Lindberg**, journalist

Print artiklen

5-6 beboere som var i behandling på skift

På få år er antallet af behandlinger faldet fra gennemsnitlig en gang om ugen til blot en enkelt gang om måneden.

Selvom symptomerne på UVI i mange tilfælde kan lindres med øget væskeindtag, så har urinstix og antibiotika været en del af en indgroet kultur.

I afdeling x i gennemsnit en af de ældre, der var syg hver måned. (har det skidt, urolige og det smitter af på gruppen. Forvirring, fald og risiko for hoftebrud og indlæggelse)

Målet var 100 dage uden urinvejsinfektion. Men projektet kan snart fejre et års dag uden brug af antibiotika og uden sygdom. Siden projektet gik i gang har ingen af de ældre haft en urinvejsinfektion, og de har ikke haft behov for antibiotika

Effectiveness of a tailored intervention to reduce antibiotics for urinary tract infections in nursing home residents: a cluster, randomised controlled trial

Sif Helene Arnold, Jette Nygaard Jensen, Lars Bjerrum, Volkert Siersma, Christine Winther Bang, Marius Brostrøm Kousgaard, Anne Holm

Lancet Infect Dis 2021; 21: 1549–56

Published Online July 22, 2021 https://doi.org/10.1016/S1473-3099(21)00001-3

See Comment page 1476

Department of Public Health, University of Copenhagen, Copenhagen, Denmark (S H Arnold PhD, Prof L Bjerrum, V Siersma PhD, C Winther Bang MSc, M Brostrøm Kousgaard PhD, A Holm PhD); Department of Clinical Microbiology, Herlev and Gentofte Hospital, University of Copenhagen, Herlev, Denmark (S H Arnold, J Nygaard Jensen PhD)

Correspondence to: Dr Sif Helene Arnold, Department of Public Health, University of Copenhagen, 1014 Copenhagen, Denmark siar@sund.ku.dk

Summary

Background When suspecting a urinary tract infection (UTI), the nursing home staff contacts a physician with clinical information on behalf of the resident; hence, poor understanding of UTI or a lack of clinical communicative skills can cause overtreatment with antibiotics. We investigated whether a tailored intervention that improves knowledge about UTI and communication skills in nursing home staff influences antibiotic prescriptions for UTI.

Methods This open-label, parallel-group, cluster randomised controlled trial was done at 22 participating nursing homes in Denmark. Patients were eligible if they were nursing home residents aged 65 years or older, had the nursing home listed as their permanent address, and resided in a living space designated for those with dementia or somatic health-care needs. We included nursing homes that were not participating in other UTI projects and those in which staff were present at all hours. Using computer-generated random numbers and stratification by municipality, a statistician randomised the nursing homes (1:1) to receive either interactive educational sessions and use of a dialogue tool or to continue standard practice. The statistical analysis was blinded. Staff attended 75 min sessions over 8 weeks to learn how to distinguish between UTIs and asymptomatic bacteriuria, evaluate non-specific symptoms, and use the dialogue tool. The primary outcome was the number of antibiotic prescriptions for acute UTI per resident per days at risk, defined as the number of days the resident had been present at the nursing home during the trial period. The trial is registered at ClinicalTrials.gov, NCT03715062.

Findings Between June 1, 2017, and June 1, 2018, 22 of 68 invited nursing homes were recruited. Of 22 randomised nursing homes (n=1625 residents), 11 received the intervention (770 [92·2%] of 835 allocated residents) and 11 were in the control group (705 [89·2%] of 790 allocated residents). The standardised number of nursing home staff was 572 in the intervention group and 535 in the control group. All nursing homes completed the trial. 65 residents were excluded from data collection in the intervention group and 85 were excluded in the control group. 1470 residents (intervention n=765; control n=705) were analysed for the primary endpoint. The number of antibiotic prescriptions for UTI per resident was 134 per 84 035 days at risk in the intervention group and 228 per 77817 days at risk in the control group. The rate ratio (RR) of receiving an antibiotic for UTI was 0·51 (95% CI 0·37–0·71) in the unadjusted model and 0·42 (0·31–0·57) in the adjusted model. Of 140 diary entries of suspected UTIs, no deaths were reported. 421 (28·5%) of 1475 residents were admitted to hospital. The risk of all-cause hospitalisation increased in the intervention group (adjusted model RR 1·28, 95% CI 0·95–1·74), whereas all-cause mortality was lower in the intervention group (0·91, 0·62–1·33).

Interpretation The intervention effectively reduced antibiotic prescriptions and inappropriate treatments for UTI without substantially influencing all-cause hospitalisations and mortality.

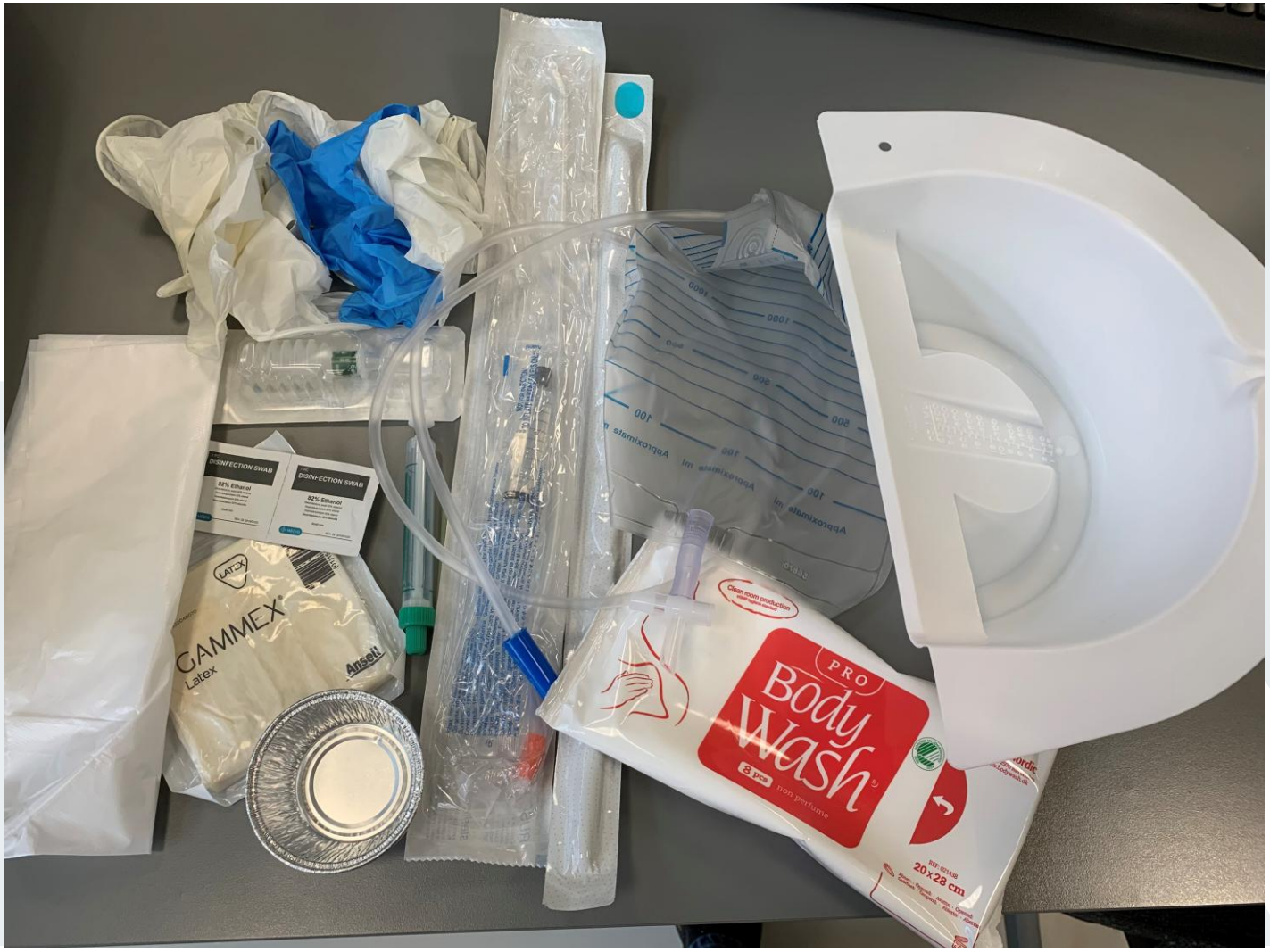
Funding Danish Ministry of Health and the Velux Foundation.

The number of antibiotic prescriptions for UTI per resident was 134 per 84035 days at risk in the intervention group and 228 per 77817 days at risk in the control group.

Forekomsten af UVI hos borgere på to plejehjem blev reduceret.

Forbruget af antibiotika blev mere end halveret.

Hvad ”koster” en UVI i engangsprodukter?



Infektionshygiejne er forebyggelse – og forebyggelse er bæredygtigt

Forskelligt perspektiv, men målet bør være det samme