Hva er effekten av integrert behandling?

Lars T. Fadnes

Haukeland University hospital (research group leader of BAR) and University of Bergen (professor)

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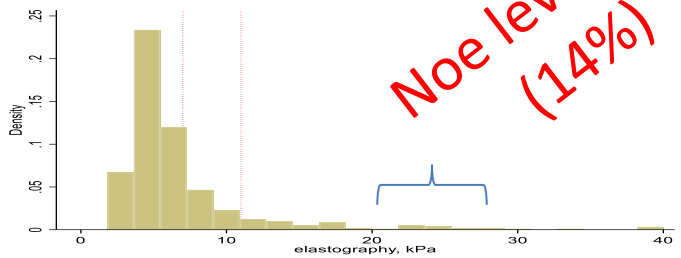
Bakgrunn

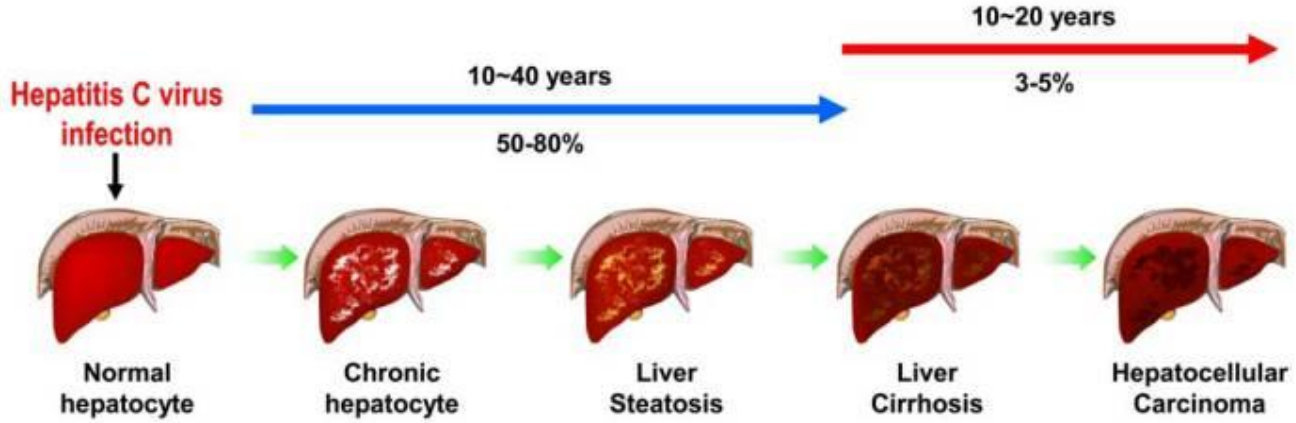
Lite leverskade (73%)

Noe leverskade (14%)

Uttalt leverskade (13%)



- 54% påvist HCV (2017/8)
- 84% har hatt eller har HCV
- <1 % syfilis eller HIV
- 2-3% aktiv hepatitt B (HBsAg)



Kartlegging

- Årlig helseundersøkelse (800 kartlagt)
- Intervju og undersøkelse av sykepleier/lege
- Blodprøver
- Elastografi (ultralydbasert)

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oLARNett

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BAR
BERGEN
ADDICTION
RESEARCH

INTRO-HCV
BERGEN ADDICTION RESEARCH

BERGEN KOMMUNE

HELSE STAVANGER
Stavanger universitetssjukehus

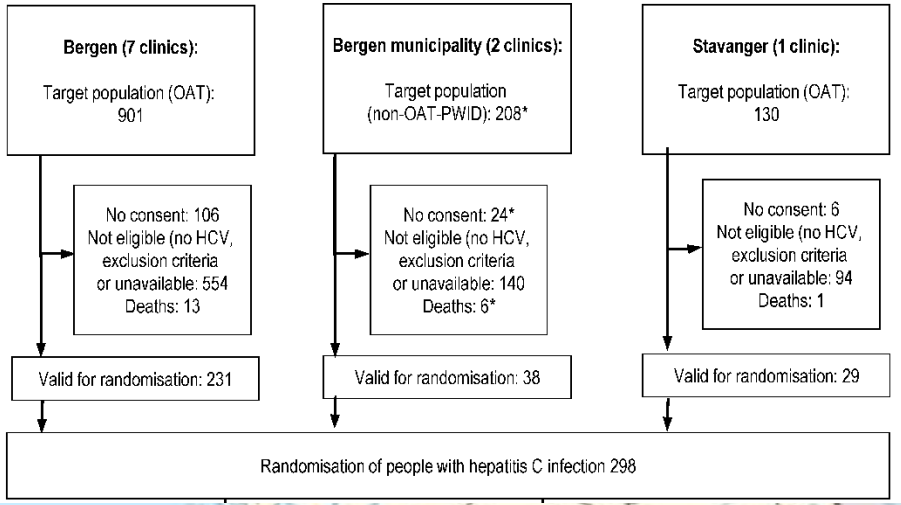
+proLAR
NASJONALT FORBUND FOR FOLK I LAR

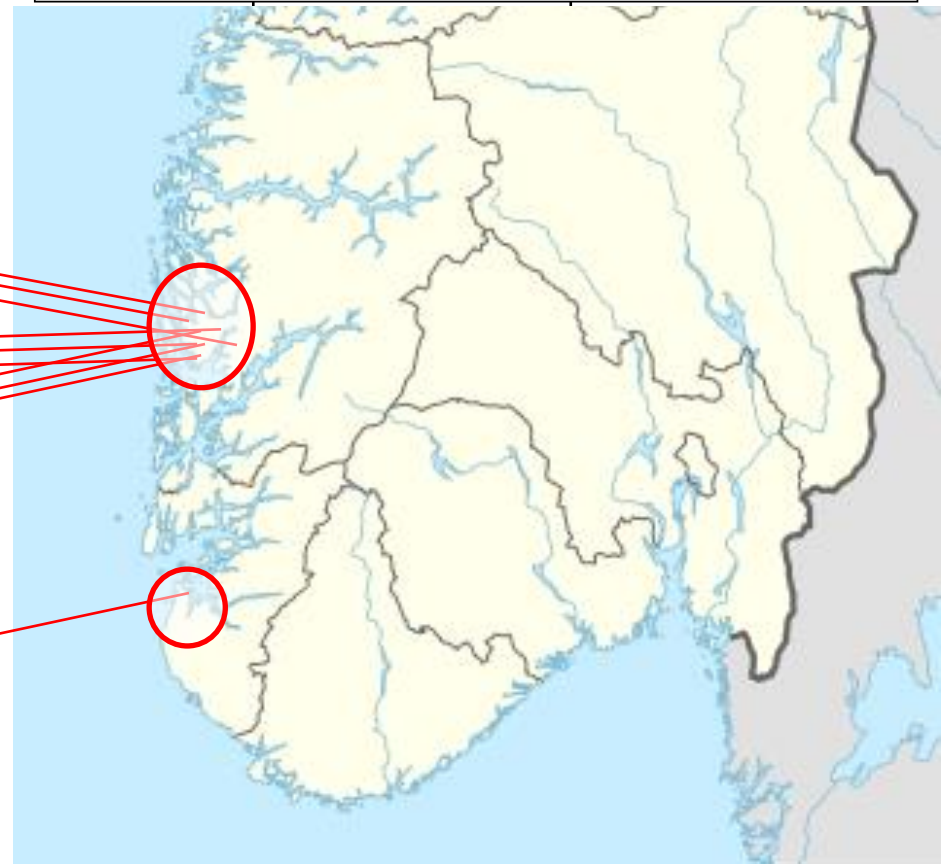
UNIVERSITETET I BERGEN

University of
BRISTOL

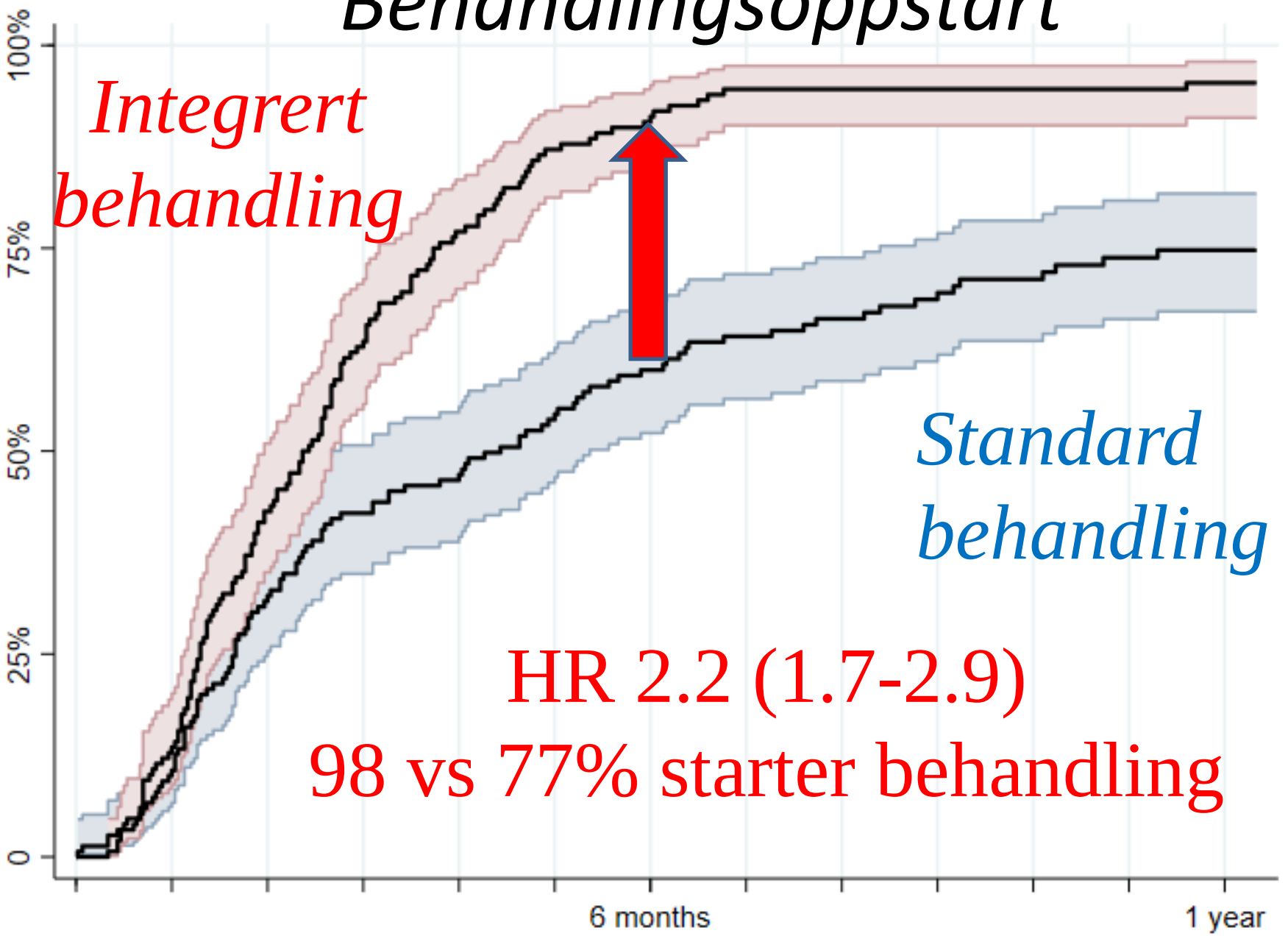
AKERSHUS UNIVERSITETSSYKEHUS

Norwegian Institute of Public Health


Bergen (7 clinics):
Target population (OAT): 901
No consent: 106
Not eligible (no HCV, exclusion criteria or unavailable: 554
Deaths: 13
Valid for randomisation: 231
Bergen municipality (2 clinics):
Target population (non-OAT-PWID): 208*
No consent: 24*
Not eligible (no HCV, exclusion criteria or unavailable: 140
Deaths: 6*
Valid for randomisation: 38
Stavanger (1 clinic):
Target population (OAT): 130
No consent: 6
Not eligible (no HCV, exclusion criteria or unavailable: 94
Deaths: 1
Valid for randomisation: 29
Randomisation of people with hepatitis C infection 298



Behandlingsoppstart

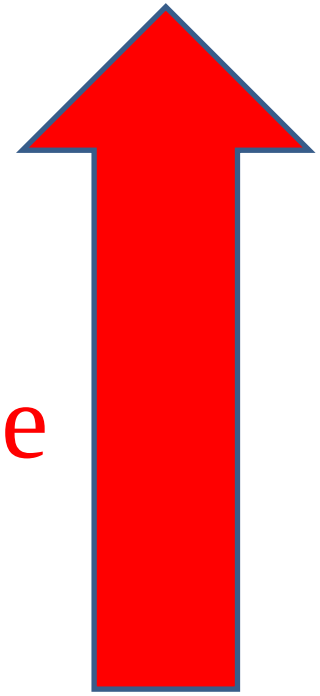


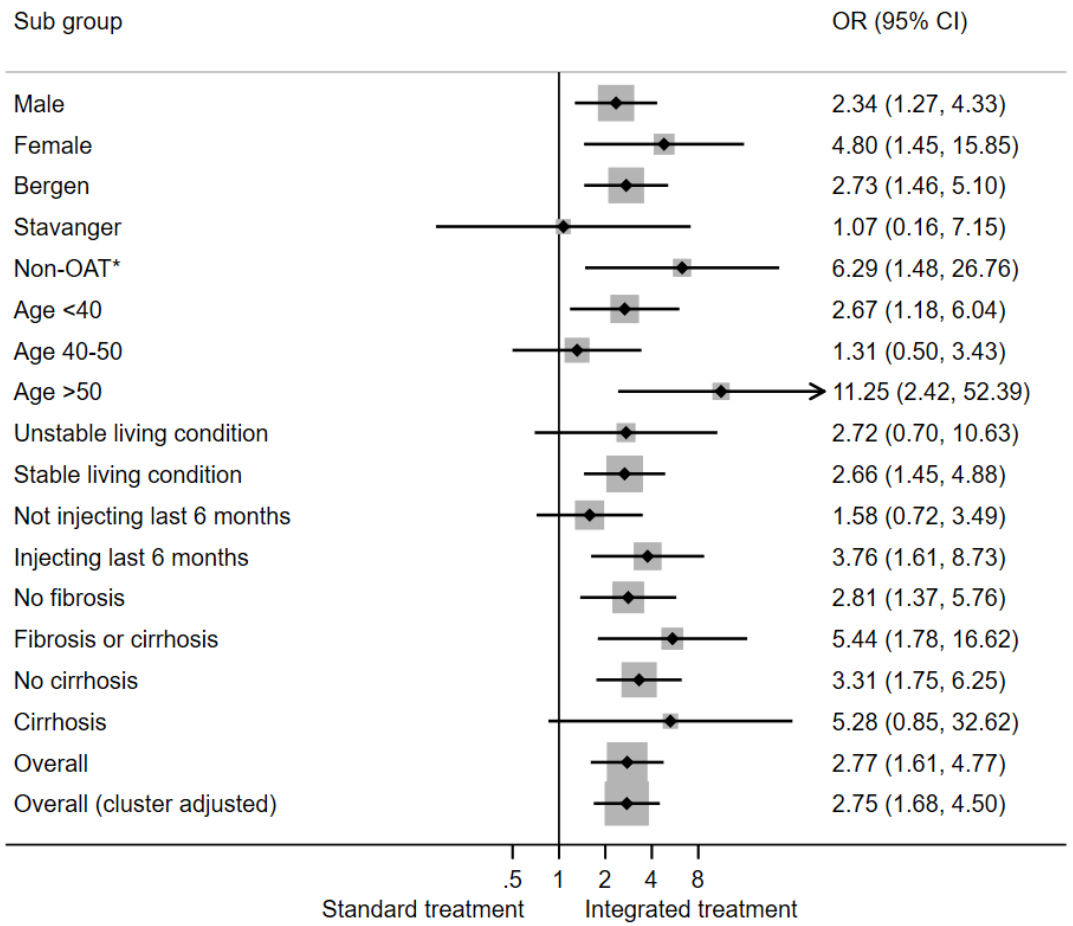
HCV virusfrihet

Integrert vs. standard behandling

20% økning i virusfrihet

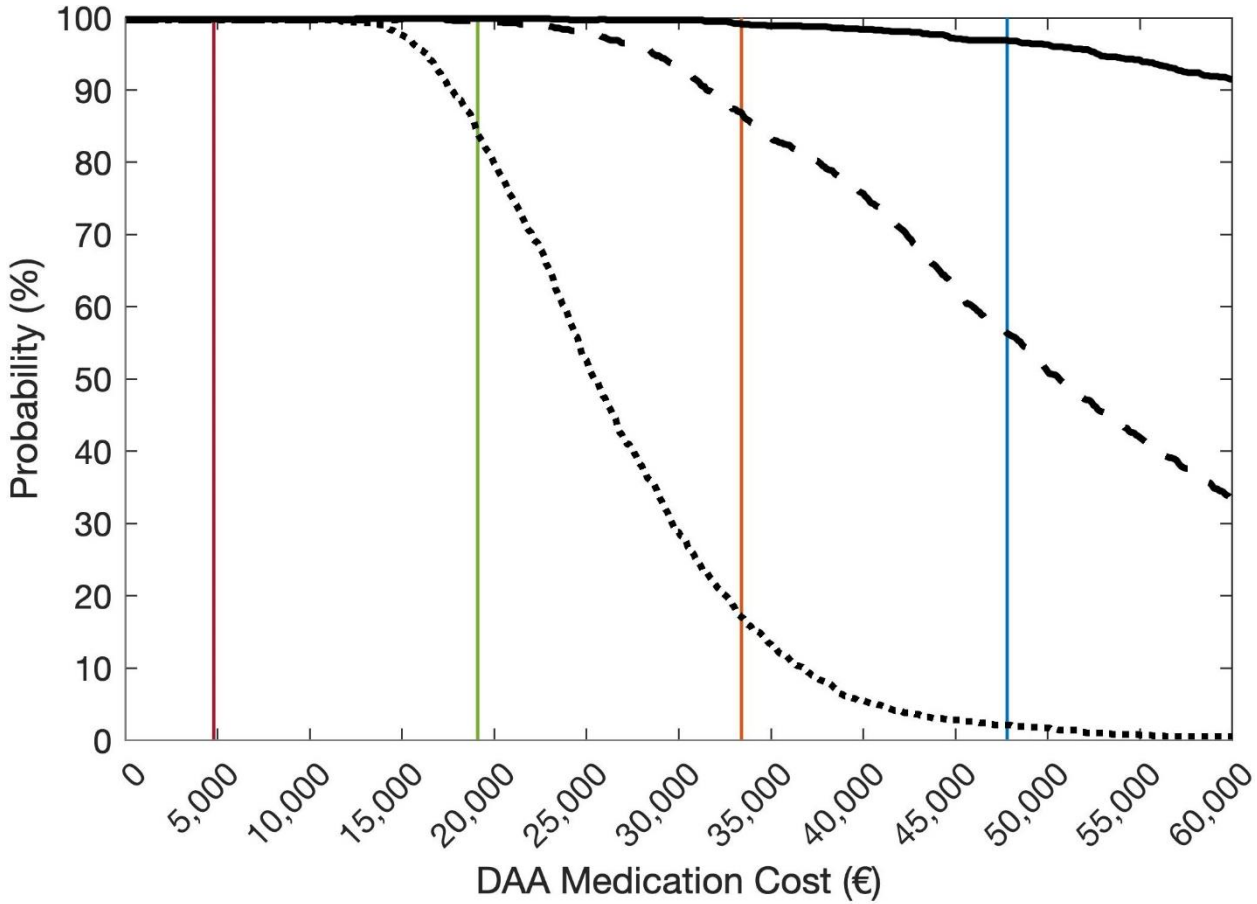
93 vs 73% som testede virusfrie
(OR 5.0, 2.3-11)



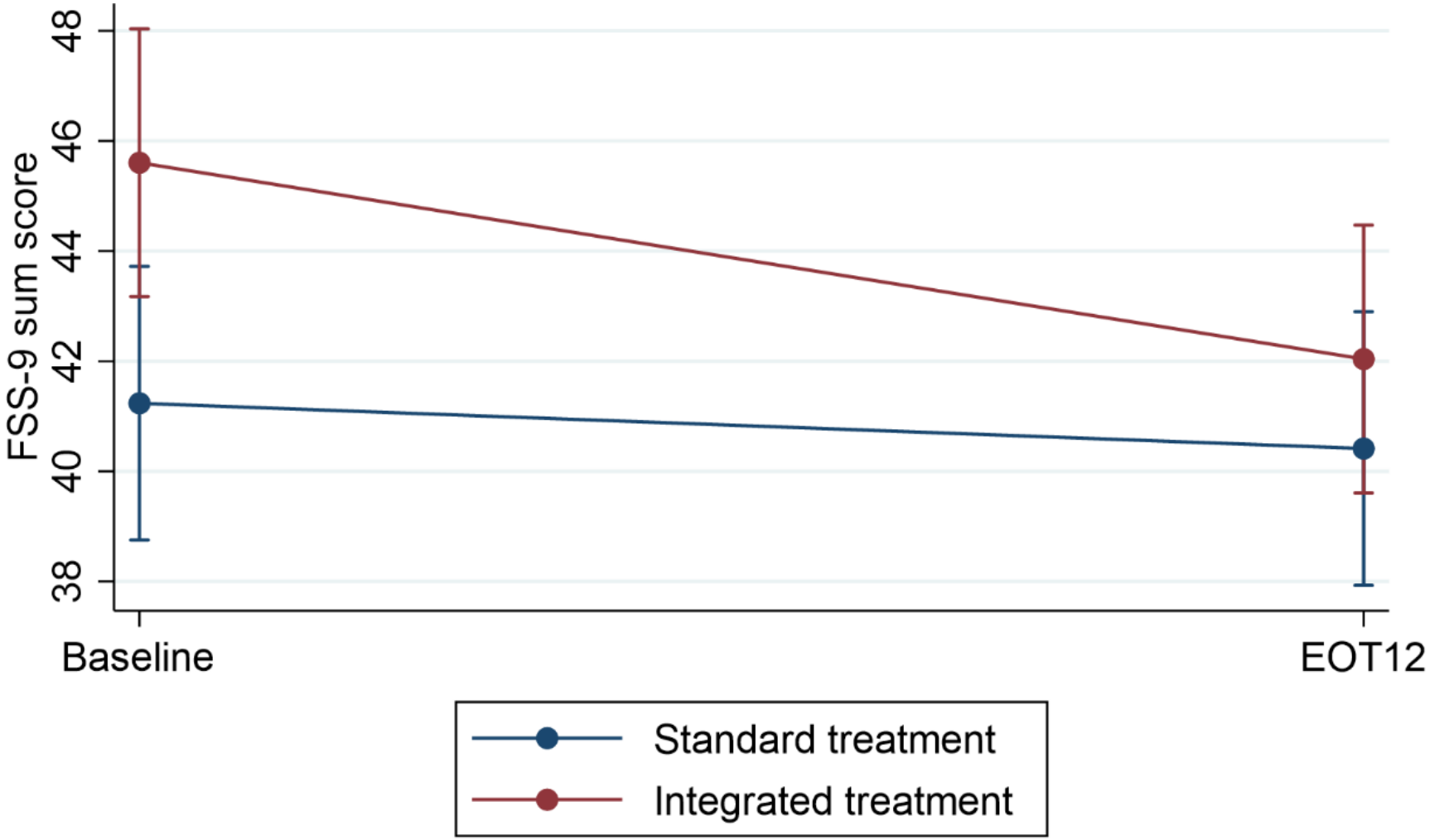


Hvilke grupper

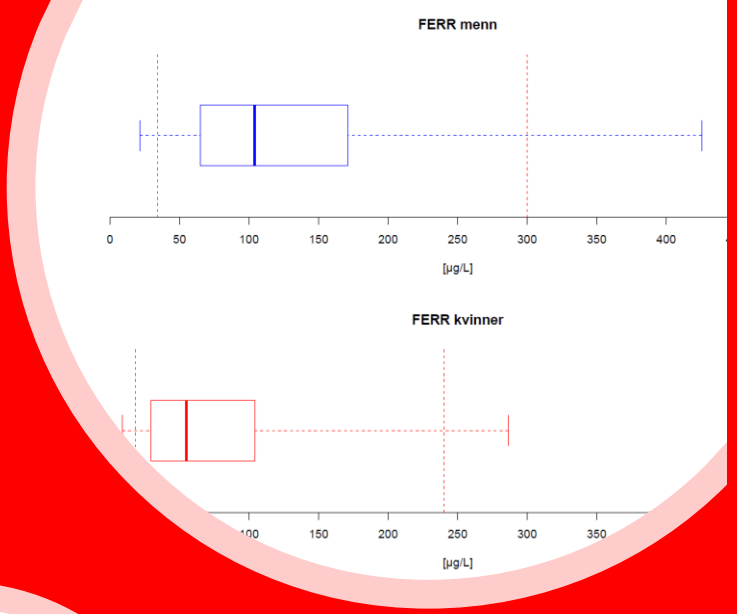
Kostnadseffektivitet av integrert HCV behandling

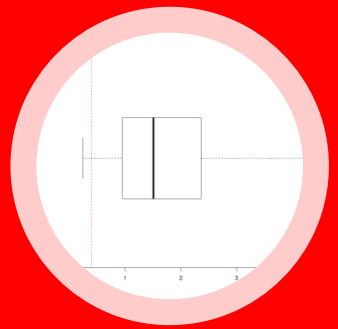


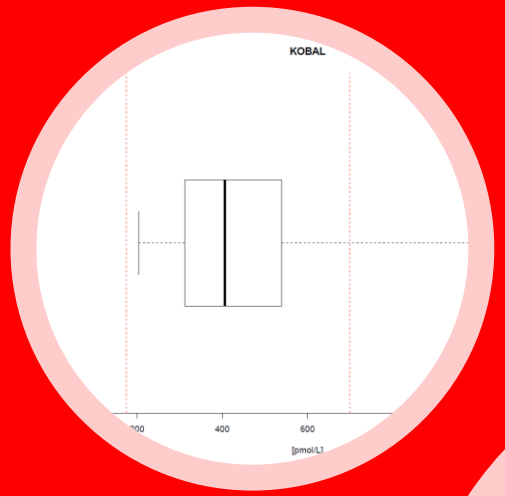
Integrert HCV behandling og fatigue

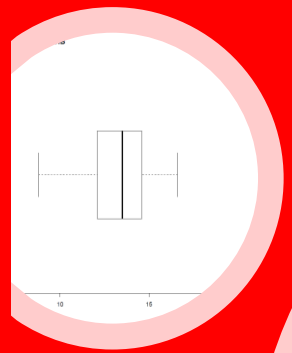


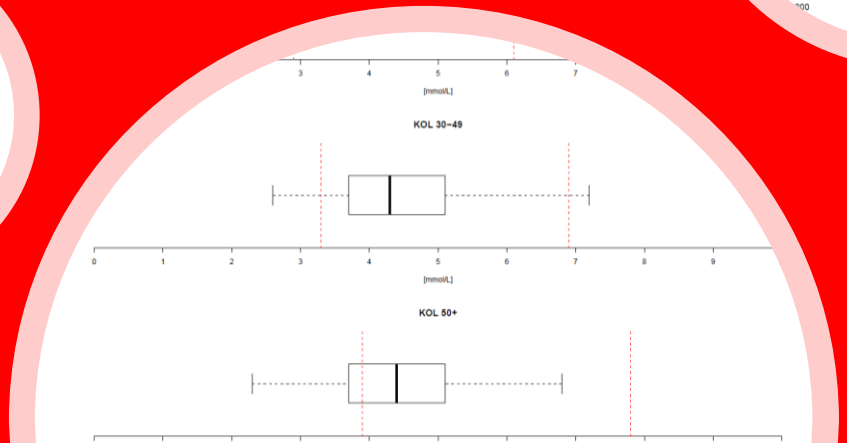
Prøver i LAR helseundersøkelse

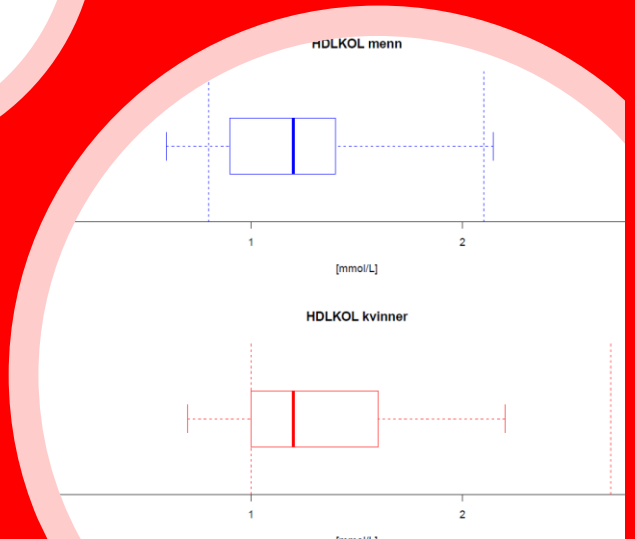


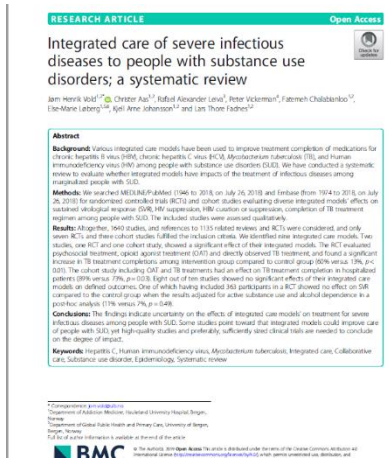












RESEARCH ARTICLE Open Access

Integrated care of severe infectious diseases to people with substance use disorders; a systematic review

Jørn Henrik Vold[1,2*], Christer Aas[1,2], Rafael Alexander Leiva[3], Peter Vickerman[4], Fatemeh Chalabianloo[1,2], Else-Marie Løberg[5,6], Kjell Arne Johansson[1,2] and Lars Thore Fadnes[1,2]

Abstract

Background: Various integrated care models have been used to improve treatment completion of medications for chronic hepatitis B virus (HBV), chronic hepatitis C virus (HCV), Mycobacterium tuberculosis (TB), and Human immunodeficiency virus (HIV) among people with substance use disorders (SUD). We have conducted a systematic review to evaluate whether integrated models have impacts of the treatment of infectious diseases among marginalised people with SUD.

Methods: We searched MEDLINE/PubMed (1946 to 2018, on July 26, 2018) and Embase (from 1974 to 2018, on July 26, 2018) for randomized controlled trials (RCTs) and cohort studies evaluating diverse integrated models' effects on sustained virological response (SVR), HIV suppression, HBV coartion or suppression, completion of TB treatment regimen among people with SUD. The included studies were assessed qualitatively.

Results: Altogether, 1640 studies, and references to 1135 related reviews and RCTs were considered, and only seven RCTs and three cohort studies fulfilled the inclusion criteria. We identified nine integrated care models. Two studies, one RCT and one cohort study, showed a significant effect of their integrated models. The RCT evaluated psychosocial treatment, opioid agonist treatment (OAT) and directly observed TB treatment, and found a significant increase in TB treatment completions among intervention group compared to control group (60% versus 13%, $p < 0.01$). The cohort study including OAT and TB treatments had an effect on TB treatment completion in hospitalised patients (89% versus 73%, $p = 0.03$). Eight out of ten studies showed no significant effects of their integrated care models on defined outcomes. One of which having included 363 participants in a RCT showed no effect on SVR compared to the control group when the results adjusted for active substance use and alcohol dependence in a post-hoc analysis (11% versus 7%, $p = 0.49$).

Conclusions: The findings indicate uncertainty on the effects of integrated care models' on treatment for severe infectious diseases among people with SUD. Some studies point toward that integrated models could improve care of people with SUD, yet high-quality studies and preferably, sufficiently sized clinical trials are needed to conclude on the degree of impact.

Keywords: Hepatitis C, Human immunodeficiency virus, Mycobacterium tuberculosis, Integrated care, Collaborative care, Substance use disorder, Epidemiology, Systematic review

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Dental health care workers' attitude towards patients with substance use disorders in medically assisted rehabilitation (MAR)

Anne Nordrehaug Åstrøm, Ferda Özkaya, Jorma Virtanen & Lars Thore Fadnes

Substance Abuse Treatment, Prevention, and Policy

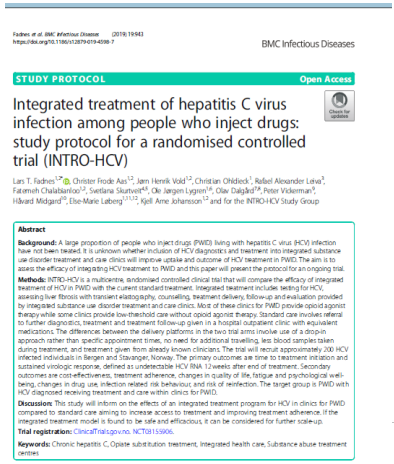
RESEARCH Open Access

Health-related quality of life of long-term patients receiving opioid agonist therapy: a nested prospective cohort study in Norway

Christer Frode Aas[1,2*], Jørn Henrik Vold[1,2], Svetlana Skurtveit[3,4], Aaron G. Lim[5], Sabine Ruths[3,6], Kamrul Islam[7,8], Jan Erik Askildsen[9], Else-Marie Løberg[5,6,10], Lars Thore Fadnes[1,2], Kjell Arne Johansson[1,2] and for the INTRO-HCV Study Group

Abstract

Background: Opioid dependence carries the highest disease burden of all illicit drugs. Opioid agonist therapy (OAT) is an evidence-based medical intervention that reduces morbidity and mortality. There is limited knowledge on the health-related quality of life (HRQoL) of long-term patients in OAT. This study measures HRQoL and self-perceived health of long-term patients on OAT, compares the scores to a Norwegian reference population, and



Fadnes et al. BMC Infectious Disease (2019) 19:943
https://doi.org/10.1186/s12879-019-4598-7

BMC Infectious Diseases

STUDY PROTOCOL Open Access

Integrated treatment of hepatitis C virus infection among people who inject drugs: study protocol for a randomised controlled trial (INTRO-HCV)

Lars T. Fadnes[1,2*], Christer Frode Aas[1,2], Jørn Henrik Vold[1,2], Christian Ohldieck[1], Rafael Alexander Leiva[3], Fatemeh Chalabianloo[1,2], Svetlana Skurtveit[4,5], Ole Jørgen Lygren[1,6], Olav Dalgård[7,8], Peter Vickerman[9], Håvard Midgard[10], Else-Marie Løberg[11,12], Kjell Arne Johansson[1,2] and for the INTRO-HCV Study Group

Abstract

Background: A large proportion of people who inject drugs (PWID) living with hepatitis C virus (HCV) infection have not been treated. It is unknown whether inclusion of HCV diagnostics and treatment into integrated substance use disorder treatment and care clinics will improve uptake and outcome of HCV treatment in PWID. The aim is to assess the efficacy of integrating HCV treatment to PWID and this paper will present the protocol for an ongoing trial.

Methods: INTRO-HCV is a multicentre, randomised controlled clinical trial that will compare the efficacy of integrated treatment of HCV in PWID with the current standard treatment. Integrated treatment includes testing for HCV, assessing liver fibrosis with transient elastography, counselling, treatment delivery, follow-up and evaluation provided by integrated substance use disorder treatment and care clinics. Most of these clinics for PWID provide opioid agonist therapy while some clinics provide low-threshold care without opioid agonist therapy. Standard care involves referral to further diagnostics, treatment and treatment follow-up given in a hospital outpatient clinic with equivalent medications. The differences between the delivery platforms in the two trial arms involve use of a drop-in approach rather than specific appointment times, no need for additional travelling, less blood samples taken during treatment, and treatment given from already known clinicians. The trial will recruit approximately 200 HCV infected individuals in Bergen and Stavanger, Norway. The primary outcomes are time to treatment initiation and sustained virologic response, defined as undetectable HCV RNA 12 weeks after end of treatment. Secondary outcomes are cost-effectiveness, treatment adherence, changes in quality of life, fatigue and psychological well-being, changes in drug use, infection related risk behaviour, and risk of reinfection. The target group is PWID with HCV diagnosed receiving treatment and care within clinics for PWID.

Discussion: This study will inform on the effects of an integrated treatment program for HCV in clinics for PWID compared to standard care aiming to increase access to treatment and improving treatment adherence. If the integrated treatment model is found to be safe and efficacious, it can be considered for further scale-up.

Trial registration: ClinicalTrial.gov.no. NCT03155906.

Keywords: Chronic hepatitis C, Opiate substitution treatment, Integrated health care, Substance abuse treatment centres

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Vold et al. BMC Health Services Research (2020) 20:668
https://doi.org/10.1186/s12913-020-05595-z

BMC Health Services Research

RESEARCH ARTICLE Open Access

Too much or too little opioids to patients receiving opioid agonist therapy in Norway (2013–2017): a prospective cohort study

Jørn Henrik Vold[1,2*], Svetlana Skurtveit[3,4], Christer Aas[1,2], Kjell Arne Johansson[1,2] and Lars Thore Fadnes[1,2]

Abstract

Background: Dispensations of opioid analgesics to patients on opioid agonist therapy (OAT) may increase the risk of overdoses. The current study's objectives are to investigate the dispensation rates and mean daily doses of dispensed opioid analgesics among patients who received OAT opioids in Norway during 2013–2017 and evaluate whether dispensing OAT opioids affects the dispensation of opioid analgesics.

Methods: Information on opioids was collected from the Norwegian Prescription Database. Dispensation rates were calculated by dividing the number of patients who were dispensed at least one opioid analgesic by the number of patients who were dispensed an OAT opioid. We calculated the mean daily dose of opioid analgesics in oral morphine equivalents. The OAT opioid dose was defined as a ratio between the dispensed doses divided by the mean recommended dose. We used logistic regression to estimate the association between the dispensation of an opioid analgesic, a dose of OAT opioids, having chronic pain, and being on palliative care.

Results: A total of 10,371 patients were dispensed at least one OAT opioid during the study period. In 2017, 18% were dispensed an opioid analgesic with a mean daily dose of 29 mg of oral morphine equivalents. Being dispensed an opioid analgesic was associated with having chronic pain (adjusted odds ratio (aOR): 5.6, 95% confidence interval: 3.2–4.2), being on palliative care (aOR: 6.1, 4.7–7.9), and receiving an OAT opioid dose below half of the recommended OAT dose (aOR: 1.7, 1.4–2.0). Similar results were seen in 2013–2016. The discontinuation of OAT opioids could increase the dose of dispensed opioid analgesics.

Vold et al. BMC Health Services Research (2020) 20:352
https://doi.org/10.1186/s12913-020-05195-5

BMC H

RESEARCH ARTICLE

Dispensations of benzodiazepines, z-hypnotics, and gabapentinoids to pa receiving opioid agonist therapy; a prospective cohort study in Norway 2013 to 2017

Jørn Henrik Vold[1,2*], Svetlana Skurtveit[3,4], Christer Aas[1,2], Fatemeh Chalabianloo[1,2], Pi Kjell Arne Johansson[1,2] and Lars Thore Fadnes[1,2]

Abstract

Background: Dispensations of benzodiazepines, z-hypnotics, and gabapentinoids to p therapy (OAT) are common and have pros and cons. The objectives of the current st dispensation rates of these potentially addictive drugs, and whether the number and dispensed OAT opioids and discontinuing OAT, are associated with being dispensed and gabapentinoids among patients on OAT in Norway in the period 2013 to 2017.

Methods: Information about all dispensed opioids, benzodiazepines, z-hypnotics and recorded from the Norwegian Prescription Database (NorPD). A total of 10,371 OAT p study period. The dispensation rates were defined as the number of patients who we the potentially addictive drugs divided among the number of patients who have disp calendar year. Mean daily doses were calculated, and for benzodiazepines and z-hypn equivalents. The association between dispensed potentially addictive drugs, and the dispensed OAT opioids were calculated by using logistic regression models.

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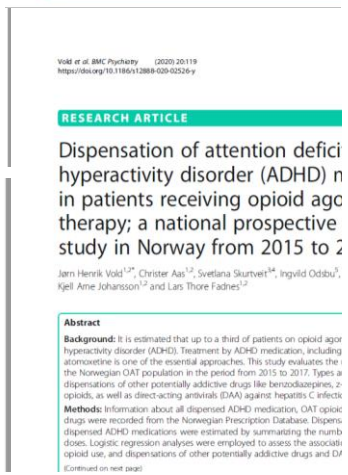

Vold et al. BMC Psychiatry (2020) 20:119
https://doi.org/10.1186/s12888-020-02526-y

RESEARCH ARTICLE

Dispensation of attention defici hyperactivity disorder (ADHD) n in patients receiving opioid ago therapy; a national prospective study in Norway from 2015 to 2

Jørn Henrik Vold[1,2*], Christer Aas[1,2], Svetlana Skurtveit[3,4], Ingvild Odsbu[5], Kjell Arne Johansson[1,2] and Lars Thore Fadnes[1,2]

Abstract

Background: It is estimated that up to a third of patients on opioid agon hyperactivity disorder (ADHD). Treatment by ADHD medication, including atomoxetine is one of the essential approaches. This study evaluates the the Norwegian OAT population in the period from 2015 to 2017. Types a dispensations of other potentially addictive drugs like benzodiazepines, z- opioids, as well as direct-acting antivirals (DAA) against hepatitis C infecti

Methods: Information about all dispensed ADHD medication, OAT opioic drugs were recorded from the Norwegian Prescription Database. Dispens dispensed ADHD medications were estimated by summarizing the numb doses. Logistic regression analyses were employed to assess the associati opioid use, and dispensations of other potentially addictive drugs and DA

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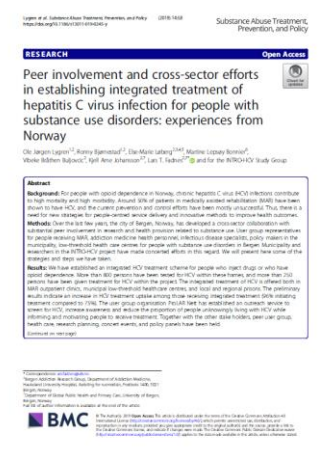

Lygren et al. Substance Abuse Treatment, Prevention, and Policy (2019) 14:58
https://doi.org/10.1186/s13011-019-0245-y

Substance Abuse Treatment, Prevention, and Policy

RESEARCH Open Access

Peer involvement and cross-sector efforts in establishing integrated treatment of hepatitis C virus infection for people with substance use disorders: experiences from Norway

Ole Jørgen Lygren[1,2], Ronny Bjørnestad[1,2], Else-Marie Løberg[3,4,5], Martine Lopsøy Bonnie[6], Vibeke Rådtnen Bajkovic[7], Kjell Arne Johansson[1,2], Lars T. Fadnes[1,2*] and for the INTRO-HCV Study Group

Abstract

Background: For people with opioid dependence in Norway, chronic hepatitis C virus (HCV) infections contribute to high mortality and high morbidity. Around 30% of patients in medically assisted rehabilitation (MAR) have been shown to have HCV, and the current prevention and control efforts have been mostly unsuccessful. Thus, there is a need for new strategies for people-centred service delivery and innovative methods to improve health outcomes.

Methods: Over the last few years, the city of Bergen, Norway, has developed a cross-sector collaboration with substantial peer involvement in research and health provision related to substance use. User group representatives for people receiving MAR, addiction medicine health personnel, infectious disease specialists, policy makers in the municipality, low-threshold health care centres for people with substance use disorders in Bergen Municipality and researchers in the INTRO-HCV project have made concerted efforts on this regard. We will present here some of the strategies and steps we have taken.

Results: We have established an integrated HCV treatment scheme for people who inject drugs or who have opioid dependence. More than 800 persons have been tested for HCV within these frames, and more than 250 persons have been given treatment for HCV within the project. The integrated treatment of HCV is offered both in MAR outpatient clinics, municipal low-threshold healthcare centres, and local and regional prisons. The preliminary results indicate an increase in HCV treatment uptake among those receiving integrated treatment (With initiating treatment compared to 75%). The user group organization ProLAR Sør has established an outreach service to screen for HCV, increase awareness and reduce the proportion of people unknowingly living with HCV while informing and motivating people to receive treatment. Together with the other stake holders, peer user group, health care, research planning, concert events, and policy papers have been held.

(Continued on next page)

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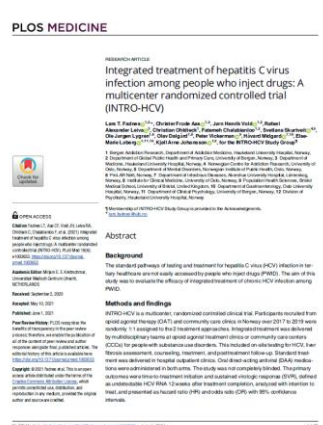
[2]Department of Global Public Health and Primary Care, University of Bergen, Bergen, Norway
Full list of author information is available at the end of the article



PLOS MEDICINE

Integrated treatment of hepatitis C virus infection among people who inject drugs: A multicenter randomized controlled trial (INTRO-HCV)

Lars T. Fadnes[1,2]*, Christer Frode Aas[1,2], Jørn Henrik Vold[1,2], Rafael Alexander Leiva[3], Christian Ohldieck[1], Fatemeh Chalabianloo[1,2], Svetlana Skurtveit[4,5], Ole Jørgen Lygren[1,6], Olav Dalgård[7], Peter Vickerman[8], Håvard Midgard[9], Else-Marie Løberg[10,11], Kjell Arne Johansson[1,2], for the INTRO-HCV Study Group

Abstract

Background

The standard pathways of testing and treatment for hepatitis C virus (HCV) infection in tertiary healthcare are not easily accessed by people who inject drugs (PWID). The aim of this study was to evaluate the efficacy of integrated treatment of chronic HCV infection among PWID.

Methods and findings

INTRO-HCV is a multicenter, randomized controlled clinical trial. Participants recruited from opioid agonist therapy (OAT) and community care clinics in Norway over 2017 to 2019 were randomly 1:1 assigned to the 2 treatment approaches. Integrated treatment was delivered by multidisciplinary teams at opioid agonist treatment clinics or community care centers (CCCs) for people with substance use disorders. This included on-site testing for HCV, liver fibrosis assessment, counseling, treatment, and post-treatment follow-up. Standard treatment was delivered in hospital outpatient clinics. Oral direct-acting antiviral (DAA) medications were administered in both arms. The study was not completely blinded. The primary outcomes were time to treatment initiation and sustained virologic response (SVR), defined as undetectable HCV RNA 12 weeks after treatment completion, analyzed with intention to treat, and presented as hazard ratio (HR) and odds ratio (OR) with 95% confidence intervals.

Evaluerer nå nye intervensjoner i samme gruppe for å teste en bredere behandlingstilnærming

- Nikotinsubstitusjon
- Aktivitetsgrupper
- Fruktsmoothie

Først pilotert, oppskaleres nå i multimodal intervensjonsstudie

BAR & INTRO-HCV på Twitter og Facebook

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Twitter https://twitter.com/bar_bergen