Sustainable work participation and return to work among long-term sick-listed people with depression in Norway

Heidi Marie Kirkeng Meling

RI-Norway, 27. February 2025

Min tilnærming til helse og arbeid

Salutogenesis – ‘The Origins of Health’

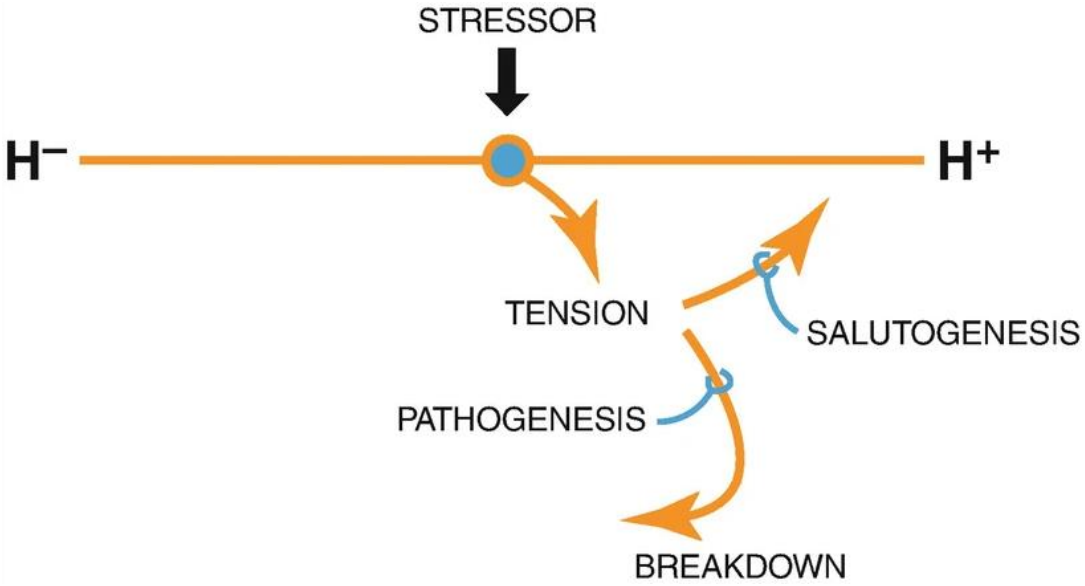
“We are all terminal cases.

And we all are, so long as there is a breath of life in us,

in some measure healthy.”

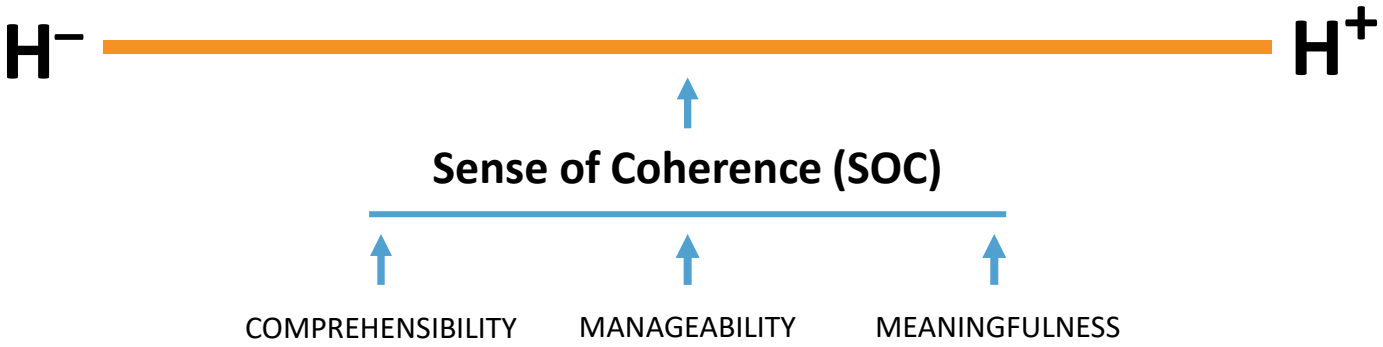
Aaron Antonovsky (1987, p.3)

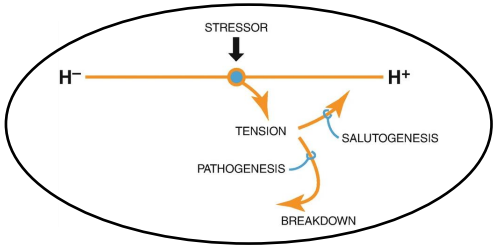
Salutogenesis – 'The Origins of Health'



(Lindström & Eriksson, 2010; Antonovsky, 1996; Antonovsky, 1987)

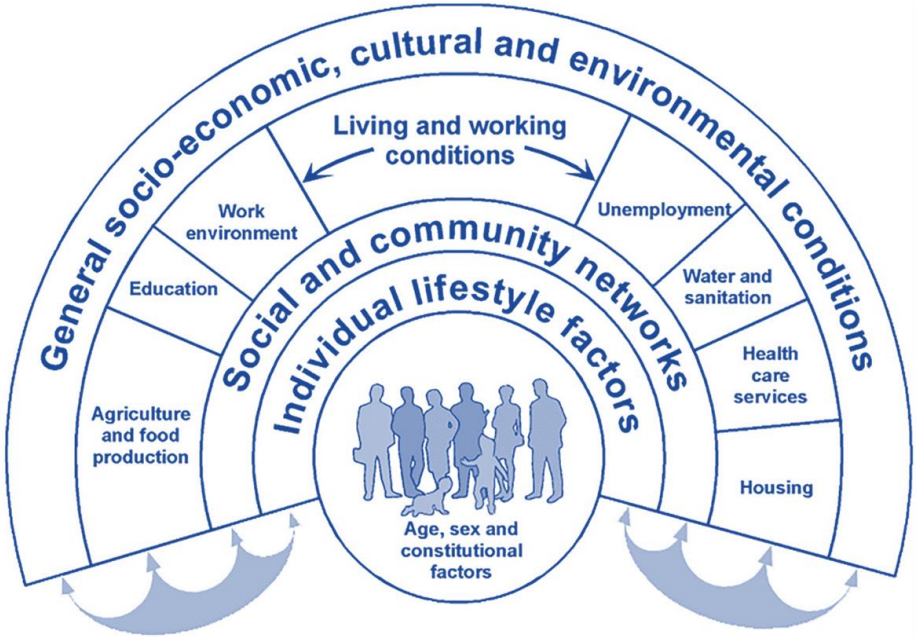
Salutogenesis – 'Sense of Coherence'

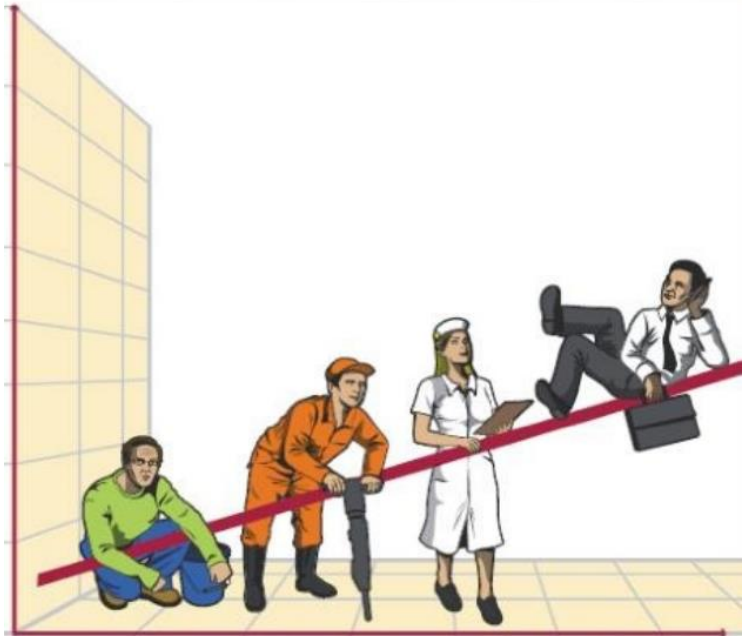




(Lindström & Eriksson, 2010; Antonovsky, 1996; Antonovsky, 1987)

Helsedeterminantene og helsegradienten





(Marmot, 2017; Dahlgren & Whitehead, 1991; Sosial- og helsedirektoratet, 2005)

Bakgrunn og definisjoner

Bakgrunn

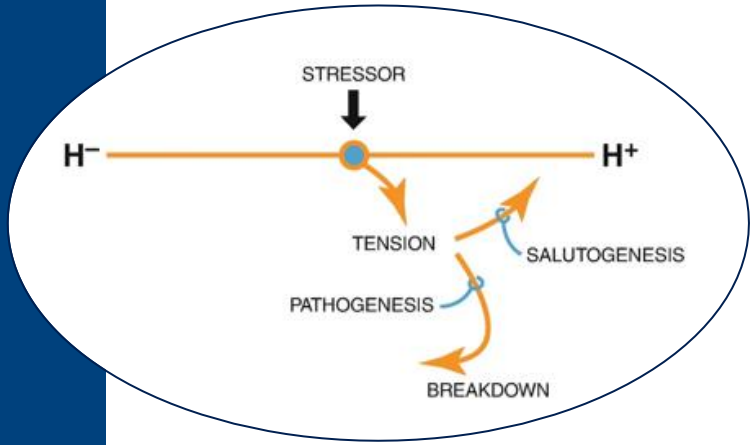
«Det er nødvendig å bryte med forestillingen om at arbeidslivet bare er for de friske.»

- NOU 2019: 7, s. 12

Psykisk helse

"...en tilstand av velvære der et individ realiserer sine egne evner, kan håndtere de normale påkjenningene i livet, kan arbeide produktivt og er i stand til å bidra til samfunnet."

WHO, 2025



Vanlige psykiske lidelser

- Angst
- Depresjon

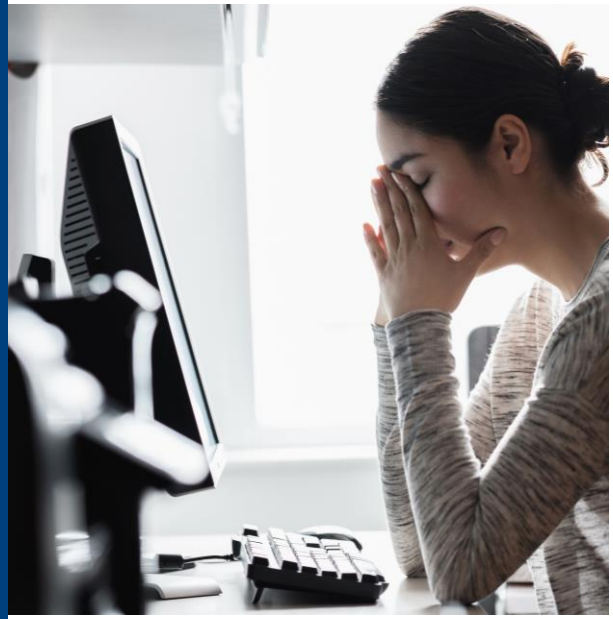
(WHO, 2025)

Depresjon og arbeidsliv

Depressive lidelser er vanlige og prevalensen øker

Depresjon er en betydelig utfordring for et bærekraftig arbeidsliv

Depresjon forårsaker høye individuelle og samfunnsmessige kostnader



(WHO, 2023; Lork et al., 2019; Nav, 2023)

Bærekraftighet (sustainability)

«…en utvikling som imøtekommer dagens behov uten å ødelegge mulighetene for at kommende generasjoner skal få dekket sine behov.»

FN, 1987

Arbeidsdeltakelse

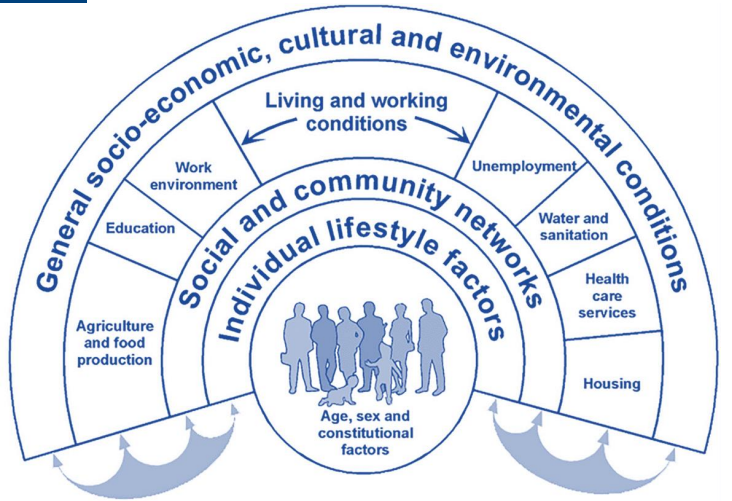
"…en persons evne og muligheter til å oppfylle en arbeidstakerrolle og skaffe og/eller opprettholde en arbeidsposisjon i samfunnet."

Sandqvist & Henriksson, 2004, s149 [min oversettelse]

Enkelt sagt handler bærekraftighet om å gjøre ting på en måte som imøtekommer dagens behov, uten å true eller svekke vår evne til å imøtekomme behov i fremtiden.

Min forståelse av bærekraftig arbeidsdeltakelse (generelt)

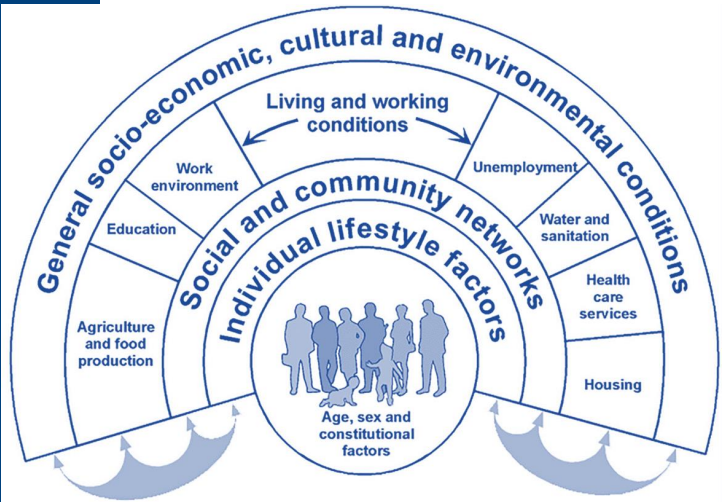
Bærekraftig arbeidsdeltakelse innebærer evnen og muligheten til å tilrettelegge forhold for arbeidsdeltakelse, som dekker behovene i nåtiden uten å true eller svekke evnen til å dekke behov i fremtiden.



(Dahlgren & Whitehead, 1991)

Min forståelse av bærekraftig arbeidsdeltakelse (individuell)

...arbeidsdeltakelse der individer har evnen og muligheten til å oppfylle en arbeidstakerrolle og skaffe og/eller opprettholde en arbeidsposisjon i samfunnet i nåtiden uten å true eller svekke deres evne og mulighet til å gjøre det i fremtiden.



(Dahlgren & Whitehead, 1991)

Vi har ikke råd til å ikke bry oss...

I dag

3,7 personer i arbeidsfør alder (20-66)

per person 67+

2050

2,4 personer I arbeidsfør alder (20-66)

per person 67+

(SSB, 2024)

Sykefravær relater til psykiske lidelser øker...

mellom

1/6 og 1/4

Personer vil oppfylle kriteriene for psykisk lidelse I et gitt år (insidens)

+53%

Økningen i sykefravær relatert til psykiske lidelser fra 2019-2024

25%

Proporsjonen av sykefravær grunnet psykiske lidelser

73.9

Gjennomsnittlig varighet på sykdomsperioder grunnet psykiske lidelser

30%

Proporsjonen av sykefravær grunnet psykiske lidelser i aldersgruppen 25-29

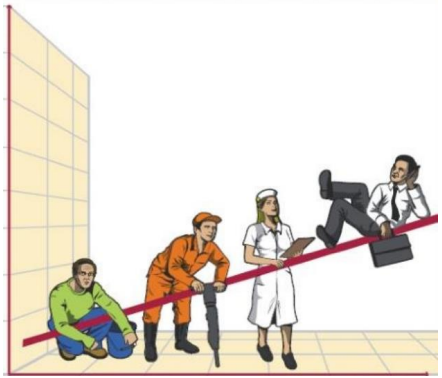
(FHI, 2023; NAV, 2022; NAV, 2024a; NAV, 2024b)

- Heidi Marie Meling, 2025 -

Socio-Economic Disparities

- Lower socio-economic status (SES) - higher risks of mental disorders, sickness absence, and disability

- Relative inequalities in self-rated and mental distress in the Norwegian population have increased
  - Low-education x3 higher likelihood of poor self-rated health and mental distress compared with those of the highest educational level



European Journal of Public Health, Vol. 34, No. 3, 435–440

https://doi.org/10.1093/eurpub/ckae019 Advance Access published on 20 February 2024

Trends in socioeconomic inequalities in self-rated health and mental distress during four decades in a Norwegian population: a HUNT Study

Hanne Dahl Vonen[1], Erik R. Sund[2,3,4], Inger Ariansen [5], Steinar Krokstad[2,3]

1 Department of Public Health and Nursing, Faculty of Medicine and Health Sciences, Norwegian University of Science and Technology, Trondheim, Norway
2 Department of Public Health and Nursing, HUNT Research Centre, Faculty of Medicine and Health Sciences, Norwegian University of Science and Technology (NTNU), Trondheim, Norway
3 Levanger Hospital, Nord-Trøndelag Hospital Trust, Levanger, Norway
4 Faculty of Nursing and Health Sciences, Nord University, Levanger, Norway
5 Department of Chronic Diseases, The Norwegian Institute of Public Health, Oslo, Norway

(Sosial- og helsedirektoratet, 2005; Allen et al., 2014;, Vonen et al.,2024; Meling et al., 2023)

Gender Disparities & Intersectionality

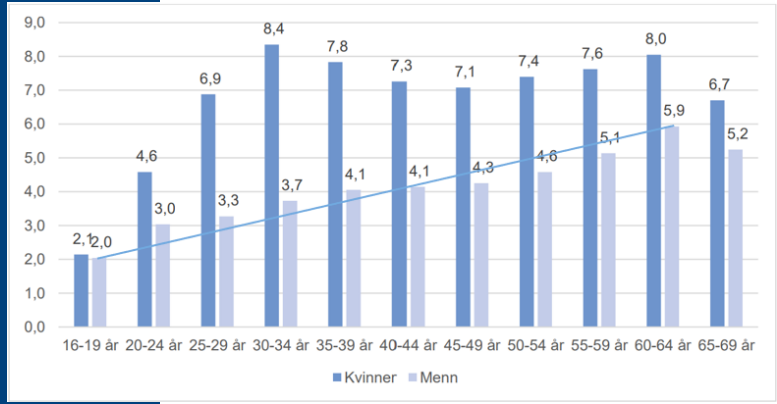
Women have higher prevalence of mental disorders and sickness absence than men

Biology (sex) and social roles (gender) create different conditions for sustainable work participation

- Gendered differences in sickness absence across the lifespan
- Gender-segregated labor market in Norway

Intersectionality

- multiple social positions and identities jointly shape human experience



(Meling et al., 2023; Bauer et al., 2021; Direktoratet for høyere utdanning og kompetanse, 2025; NAV, 2024c)

Gender Disparities & Intersectionality

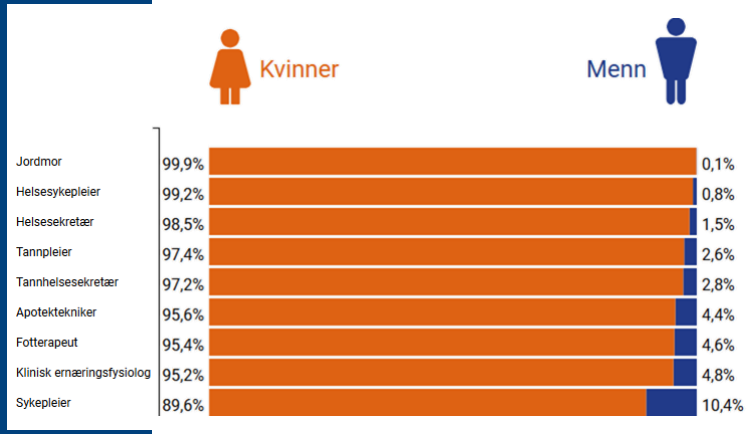
Women have higher prevalence of mental disorders and sickness absence than men

Biology (sex) and social roles (gender) create different conditions for sustainable work participation

- Gendered differences in sickness absence across the lifespan
- Gender-segregated labor market in Norway

Intersectionality

- multiple social positions and identities jointly shape human experience



(Meling et al., 2023; Bauer et al., 2021; Direktoratet for høyere utdanning og kompetanse, 2025; NAV, 2024c)

Gender Disparities & Intersectionality

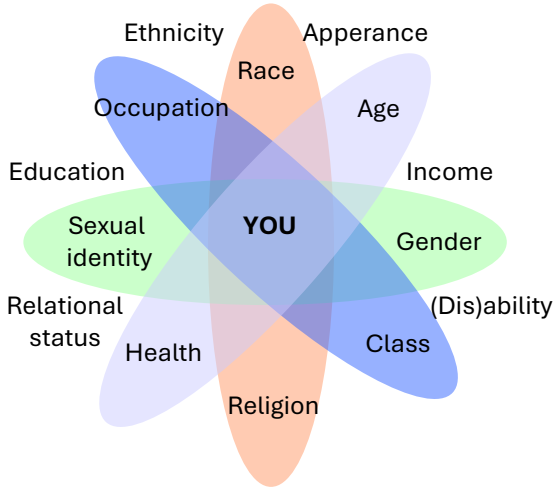
Women have higher prevalence of mental disorders and sickness absence than men

Biology (sex) and social roles (gender) create different conditions for sustainable work participation

- Gendered differences in sickness absence across the lifespan
- Gender-segregated labor market in Norway

Intersectionality

- multiple social positions and identities jointly shape human experience



(Meling et al., 2023; Bauer et al., 2021; Direktoratet for høyere utdanning og kompetanse, 2025; NAV, 2024c)

Doktorgradsprosjektet

Sustainable work participation and return to work

A lot of research has been done on factors influencing return to work, but a lot less on what happens *after* return…

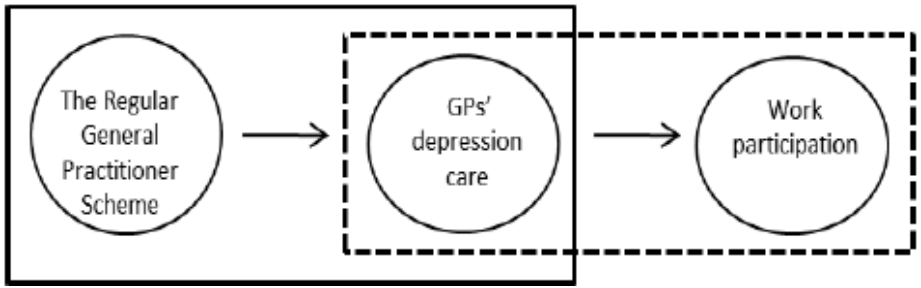
Sustainable return to work (SRTW)

- the most important criteria for ‘successful RTW’ by stakeholders
- evidence of predictors for SRTW:
  - personal characteristics (e.g., self-efficacy)
  - work-related factors (e.g., support from managers)
  - sociodemographic aspects (e.g., higher education)

(Hees et al., 2012; Entuknwa et al., 2019; Young et al., 2005;)

Study setting – The Norwegian GP-DEP Study

"The regular general practitioner scheme: integrated and equitable pathways of depression care, facilitating work participation"



Aim

Primary aim: to enhance our understanding of sustainable work participation and return to work for long-term sick-listed workers presenting with depression in general practice.

Secondary aim: to explore stakeholder views on work participation for workers with depression and intersectoral collaboration in depression care.

Three studies

Study	Study I	Study II	Study III
Design	Qualitative	Register-based longitudinal cohort study	Register-based longitudinal cohort study
Data Collection	Focus Groups	Register	Register
Exposure-Outcome	Stakeholder views of work participation for workers with depression and intersectoral collaboration in depression care	Level of education and SRTW	Depression care trajectories during the initial three months of sick leave and SRTW

Study 1

Research Questions

1) What are Norwegian depression care stakeholders' views on work participation for workers with depression, and
2) what are their views on how intersectoral collaboration can support work participation for workers with depression?

SCANDINAVIAN JOURNAL OF PRIMARY HEALTH CARE
2023, VOL. 41, NO. 3, 204–213
https://doi.org/10.1080/02813432.2023.2238019

Taylor & Francis
Taylor & Francis Group

RESEARCH ARTICLE

OPEN ACCESS Check for updates

Stakeholder views on work participation for workers with depression and intersectoral collaboration in depression care: a focus group study with a salutogenic perspective

Heidi Marie Meling[a,b], Norman Anderssen[a,c], Sabine Ruths[a,b], Stefán Hjörleifsson[a,b] and Inger Haukenes[a,b]

[a]Research Unit for General Practice, NORCE – Norwegian Research Centre, Bergen, Norway; [b]Department of Global Public Health and Primary Care, University of Bergen, Bergen, Norway; [c]Department of Psychosocial Science, University of Bergen, Bergen, Norway

ABSTRACT

Objective: To explore how stakeholders in depression care view intersectoral collaboration and work participation for workers with depression.

Design: Focus group study applying reflexive thematic analysis using a salutogenic perspective.

Setting and subjects: We conducted seven focus group interviews in six different regions in Norway with 39 participants (28 women); three groups consisted of general practitioners (GPs), two of psychologists and psychiatrists and two of social welfare workers and employers (of which one group also included GPs).

Results: Stakeholders considered work participation salutary for most workers with depression, given the right conditions (e.g. manageable work accommodations and accepting and inclusive workplaces). They also highlighted work as an integral source of meaningfulness to many workers with depression. Early collaborative efforts and encouraging sick-listed workers to stay connected to the workplace were considered important to avoid long and passive sickness absences. Furthermore, stakeholders' views illuminated why intersectoral collaboration matters in depression care; individual stakeholders have limited information about a worker's situation, but through collaboration and shared insight, especially in in-person collaborative meetings, they (and the worker) can gain a shared understanding of the situation, thereby enabling more optimal support. Ensuring adequate information flow for optimal and timely follow-up of workers was also emphasized.

Conclusions: Stakeholders highlighted the salutary properties of work participation for workers with depression under the right conditions. Intersectoral collaboration could support these conditions by sharing insight and knowledge, building a shared understanding of the worker's situation, assuring proper information flow, and ensuring early and timely follow-up of the worker.

ARTICLE HISTORY
Received 25 May 2023
Accepted 2 June 2023

KEYWORDS
Intersectoral collaboration; depression; sick leave; return-to-work; sense of coherence; focus groups; work participation

Study 1 – Methods and Theory

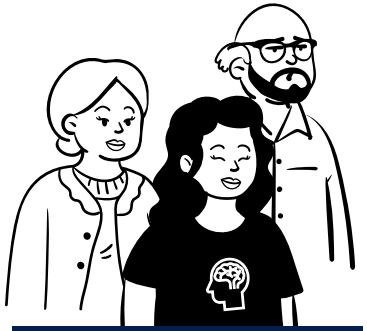
7 focus group interviews

- in 6 Norwegian locations in Norway

Reflexive Thematic Analysis

Sense of Coherence

- Comprehensibility
- Manageability
- Meaningfulness



Specialized Mental Healthcare
2 groups

NAV & employers
2 groups

GPs
3 groups

Study 1 Results – Two main themes

The salutary value of work, given the right conditions

“I had a case where a man had been severely depressed over time. He couldn’t do his job or answer enough calls or emails. It all piled up, exacerbating his depression. However, his boss had taken a course on sick leave management. So, when the man returned to work, his boss had fixed everything! He let the man choose his work responsibilities and tasks and filtered his calls and emails so that he would only have to deal with issues related to these chosen tasks as he started back up.”

(Liv, Psychologist, FG 1)

How intersectoral collaboration can help support workers with depression

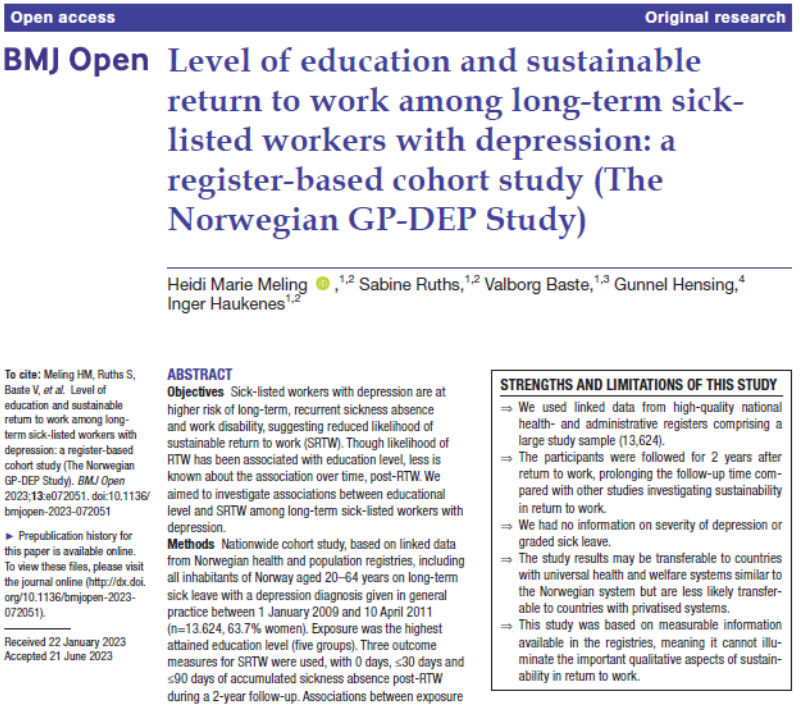
“Sometimes sick-leave certifications tumble in without us even getting a chance to say: ‘Here we could have made work modifications and avoided sick-leave.’

(Hanna, Employer, FG 7)

Study 2

Research Questions

1) What is the association between education level and three SRTW measures during a 2-year follow-up of men and women after long-term sick leave with depression?
2) how do sociodemographic variables, occupational category, and length of sick leave influence the association?



Open access Original research

BMJ Open

Level of education and sustainable return to work among long-term sick-listed workers with depression: a register-based cohort study (The Norwegian GP-DEP Study)

Heidi Marie Meling [1,2] Sabine Ruths,[1,2] Valborg Baste,[1,3] Gunnel Hensing,[4] Inger Haukenes[1,2]

To cite: Meling HM, Ruths S, Baste V, *et al*. Level of education and sustainable return to work among long-term sick-listed workers with depression: a register-based cohort study (The Norwegian GP-DEP Study). *BMJ Open* 2023;**13**:e072051. doi:10.1136/bmjopen-2023-072051

► Prepublication history for this paper is available online. To view these files, please visit the journal online (http://dx.doi.org/10.1136/bmjopen-2023-072051).

Received 22 January 2023
Accepted 21 June 2023

ABSTRACT

Objectives Sick-listed workers with depression are at higher risk of long-term, recurrent sickness absence and work disability, suggesting reduced likelihood of sustainable return to work (SRTW). Though likelihood of RTW has been associated with education level, less is known about the association over time, post-RTW. We aimed to investigate associations between educational level and SRTW among long-term sick-listed workers with depression.

Methods Nationwide cohort study, based on linked data from Norwegian health and population registries, including all inhabitants of Norway aged 20–64 years on long-term sick leave with a depression diagnosis given in general practice between 1 January 2009 and 10 April 2011 (n=13.624, 63.7% women). Exposure was the highest attained education level (five groups). Three outcome measures for SRTW were used, with 0 days, ≤30 days and ≤90 days of accumulated sickness absence post-RTW during a 2-year follow-up. Associations between exposure

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ We used linked data from high-quality national health- and administrative registers comprising a large study sample (13,624).
⇒ The participants were followed for 2 years after return to work, prolonging the follow-up time compared with other studies investigating sustainability in return to work.
⇒ We had no information on severity of depression or graded sick leave.
⇒ The study results may be transferable to countries with universal health and welfare systems similar to the Norwegian system but are less likely transferable to countries with privatised systems.
⇒ This study was based on measurable information available in the registries, meaning it cannot illuminate the important qualitative aspects of sustainability in return to work.

Study 3 – Data and Methods

Data sources

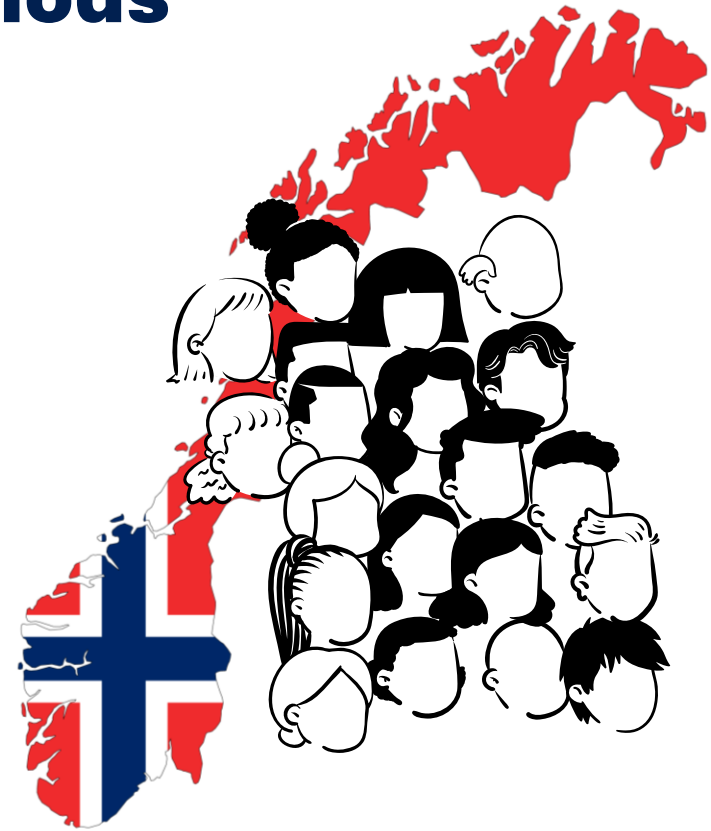
Linked data from population, health, and social insurance registries

Study population (Studies II & III)

N=13 624

During the period 2009-2011

- Age 20-64
- Depression diagnosis (ICPC-2 P76)
- Long-term sick listing (>3 months)



Study 2 – Variables and Analyses

Variables

- Exposure: Educational level
- Outcome: SRTW (three cutoffs)

  SRTW 0, SRTW ≤30, SRTW ≤90

Covariates

Age; Income level; Occupational category; Marital status; Urbanity; Duration of initial sick leave

Analyses

Gender-stratified Poisson regression

Study 2: Results

Educational gradient

- increased likelihood of SRTW (0, ≤30, and ≤90) among men and women

Among men

- educational differences mainly explained by occupation

Among women

- educational differences remained large after adjusting for occupation

Adjusting for other covariates had limited impact

Study 3

Research Questions

1) What depression care trajectories emerge among men and women on long-term sick leave with depression during the first three months of sick leave?
2) What is the association between the depression care trajectories and SRTW during a 2-year follow-up of men and women after long-term sick leave with depression, and
3) how do sociodemographic variables and occupational categories influence the association?

Meling et al. BMC Health Services Research (2025) 25:280
https://doi.org/10.1186/s12913-025-12406-4

BMC Health Services Research

RESEARCH Open Access

Depression care trajectories and sustainable return to work among long-term sick-listed workers: a register-based study (The Norwegian GP-DEP Study)

Heidi Marie Meling[1,2*], Valborg Baste[1,3], Sabine Ruths[1,2], Norman Anderssen[4] and Inger Haukenes[1,2]

Abstract

Background Depressive disorders can negatively impact work life sustainability for affected individuals. Little is known about depression care trajectories and their association with sustainable return to work (SRTW) after long-term sick leave. This study aimed to identify depression care trajectories during the first three months of sick leave among long-term sick-listed workers with depression and investigate their associations with SRTW.

Methods Design Nationwide cohort study using linked data from Norwegian health and population registries. Study population: All inhabitants of Norway aged 20–64 from 1 January 2009 to 1 April 2011, who were diagnosed with depression in general practice, and had reached three months consecutive sick leave ($n = 13\,624$, 63.7% women). Exposure: Depression care trajectories during the first three months of initial sick leave, identified using group-based multi-trajectory modeling. Types of depression care included were general practitioner (GP) consults, GP longer consults and/or talking therapy, antidepressant medication (MED), and specialized mental healthcare. Outcome: SRTW, measured by accumulated all-cause sickness absence days during two-year follow-up after initial sick leave, with cut-offs at 0, ≤ 30, and ≤ 90 days. Analysis: Gender stratified generalized linear models, used to investigate the associations between depression care trajectories and SRTW, adjusting for sociodemographic factors and sick leave duration.

Results Four depression care trajectory groups were identified: *"GP 12 weeks"* (37.2%), *"GP 2 weeks"* (18.6%), *"GP & MED 12 weeks"* (40.0%), and *"Specialist, GP & MED 12 weeks"* (8.7%). The *"GP 12 weeks"* group (reference) had the highest proportion attaining SRTW for both genders. Men in the *"GP 2 weeks"* group had a 12–14% lower likelihood for SRTW compared to the reference. Women in the *"Specialist,GP & MED 12 weeks 12 weeks"* group had a 19- 23% lower likelihood for SRTW compared to the reference.

Conclusion The association between depression care trajectories and SRTW varies by gender. However, trajectories involving follow-up by the GP, including both standard and longer consults and/or talking therapy over 12 weeks, showed the highest likelihood of SRTW for both genders. Enhancing GP resources could improve SRTW outcomes by allowing more frequent and longer consultations or talking therapy.

Keywords Depression, General practice, Sick leave, Sustainable return-to-work, Mental health, Drug therapy, Psychotherapy, Specialized mental healthcare, Health services research, Large database research

Study 3 – Data and Methods

Data sources

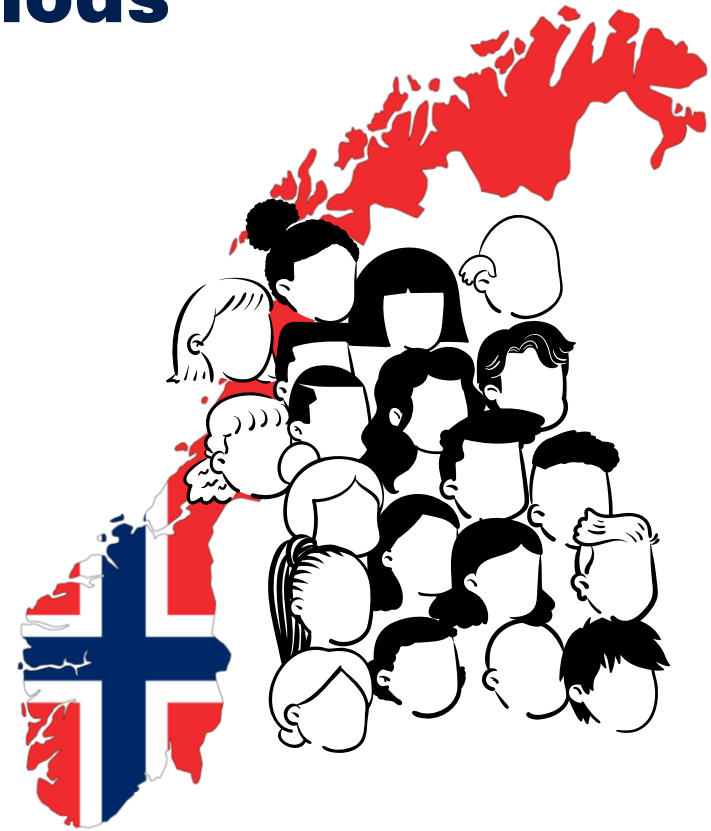
Linked data from population, health, and social insurance registries

Study population (Studies II & III)

N=13 624

During the period 2009-2011

- Age 20-64
- Depression diagnosis (ICPC-2 P76)
- Long-term sick listing (>3 months)



Study 3 – Variables

Variables

- Exposure: Depression care trajectories
- Outcome: SRTW (three cutoffs)

  SRTW 0, SRTW ≤30, SRTW ≤90

Covariates

Age; Income level; Occupational category; Educational level

Analyses

Group-Based Multi-Trajectory Analysis

Gender-stratified Poisson regression

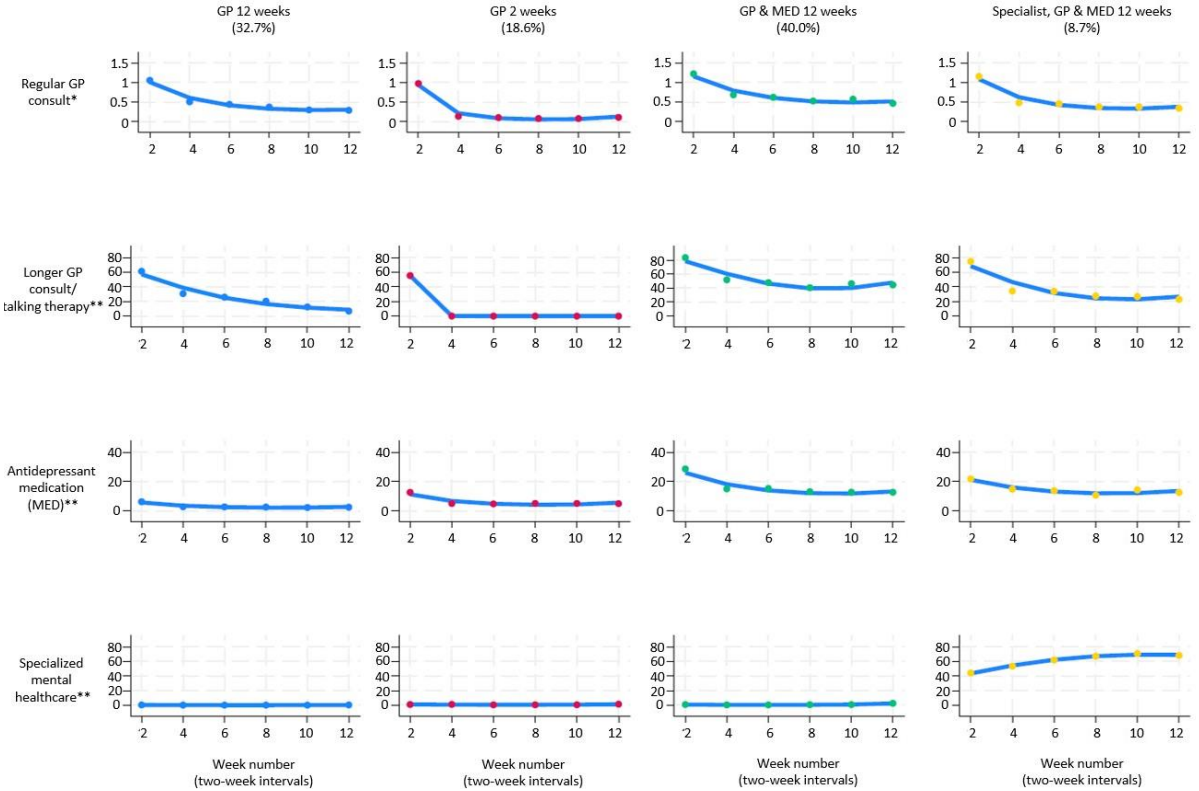
Study 3 – Results identified depression care trajectories

Four depression care trajectories:

- ‘GP 12 weeks’
- ‘GP 2 weeks’
- ‘GP & MED 12 weeks’
- ‘Specialist, GP & MED 12 weeks’

Four depression care modalities:

- Regular GP consultations
- Longer GP consultations including talking therapy
- Antidepressant medication
- Specialized mental healthcare



Study 3 – Results Trajectories and SRTW

Associations between depression care trajectories and SRTW

- Men and women in the ‘GP 12 weeks’ trajectory (reference group) had a statistically higher likelihood of SRTW compared to the other trajectories.

- Men in the ‘GP 2 weeks’ trajectory had a 14% lower likelihood of SRTW without sickness absence during follow-up compared to the reference group.

- Women in the ‘Specialist, GP & MED 12 weeks’ trajectory had a 23% lower likelihood of SRTW without sickness absence during follow-up compared to the reference group.

Conclusion

Intersectoral collaboration in depression care –

untapped potential?

Variation in education and type of work affect the likelihood of SRTW – gendered patterns warrant holistic approaches to RTW.

Depression care trajectories are associated with SRTW - richer data is needed to get a clearer picture.

Tanker etter doktorgradsarbeidet

Strengthen Intersectoral Collaboration

Early and timely intervention

Identify resources in collaboration and across sectors

- *It is hard for individual stakeholders to see the whole picture of a worker's situation*

(Meling et al., 2023)

Teach Health Literacy

an individual's ability to **access**, **understand**, **appraise**, and **apply** health information in a way that promotes health.

- Different levels (individually, organizationally, professionally)
- Different types (general/mental + social insurance literacy)

(Sørensen et al., 2012; Ståhl et al., 2021)

Thank you for your attention!

Links

Meling, H. M., Anderssen, N., Ruths, S., Hjörleifsson, S., & Haukenes, I. (2023). Stakeholder views on work participation for workers with depression and intersectoral collaboration in depression care: a focus group study with a salutogenic perspective. *Scandinavian Journal of Primary Health Care, 1-10. https://doi.org/10.1080/02813432.2023.2238019*

Meling, H. M., Ruths, S., Baste, V., Hensing, G., & Haukenes, I. (2023). Level of education and sustainable return to work among long-term sick-listed workers with depression: a register-based cohort study (The Norwegian GP-DEP Study). *BMJ Open, 13(7), e072051. https://doi.org/10.1136/bmjopen-2023-072051*

Meling, H. M., Baste, V., Ruths, S., Anderssen, N., & Haukenes, I. (2025). Depression care trajectories and sustainable return to work among long-term sick-listed workers: a register-based study (The Norwegian GP-DEP Study). *BMC Health Services Research, 25(1), 280. https://doi.org/10.1186/s12913-025-12406-4*

AVHANDLINGEN:
Bergen Open Research Archive: Sustainable work participation and return to work among long-term sick-listed people with depression in Norway