

Occupational health research – needed and evolved

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OCCUPATIONAL HEALTH

WHO'S DEFINITION

Occupational health is an area of work in public health to promote and maintain highest degree of physical, mental and social well-being of workers in all occupations.

Its objectives are:

- 1. the maintenance and promotion of workers' health and working capacity;**
- 2. the improvement of working conditions and the working environment to become conducive to safety and health;**
the development of work organization and working cultures that should reflect essential value systems adopted by the undertaking concerned, and include effective managerial systems, personnel policy, principles for participation, and voluntary quality-related management practices to improve occupational safety and health.

The science and practice of occupational health involves several disciplines, such as occupational medicine, nursing, ergonomics, psychology, hygiene, safety and other.

WORLD

In very rapid transformation: e.g., digitalization, globalization, urbanization, sustainability, diversity issues, climate change, conflicts etc.

WORK

In transformation: platform work, precarious work, effects of artificial intelligence, automatization and changes of world but also some work tasks remain as construction, mining, agriculture, fishery, hunting

HUMANS

Are we the same or are the younger generations weaker than older ones?

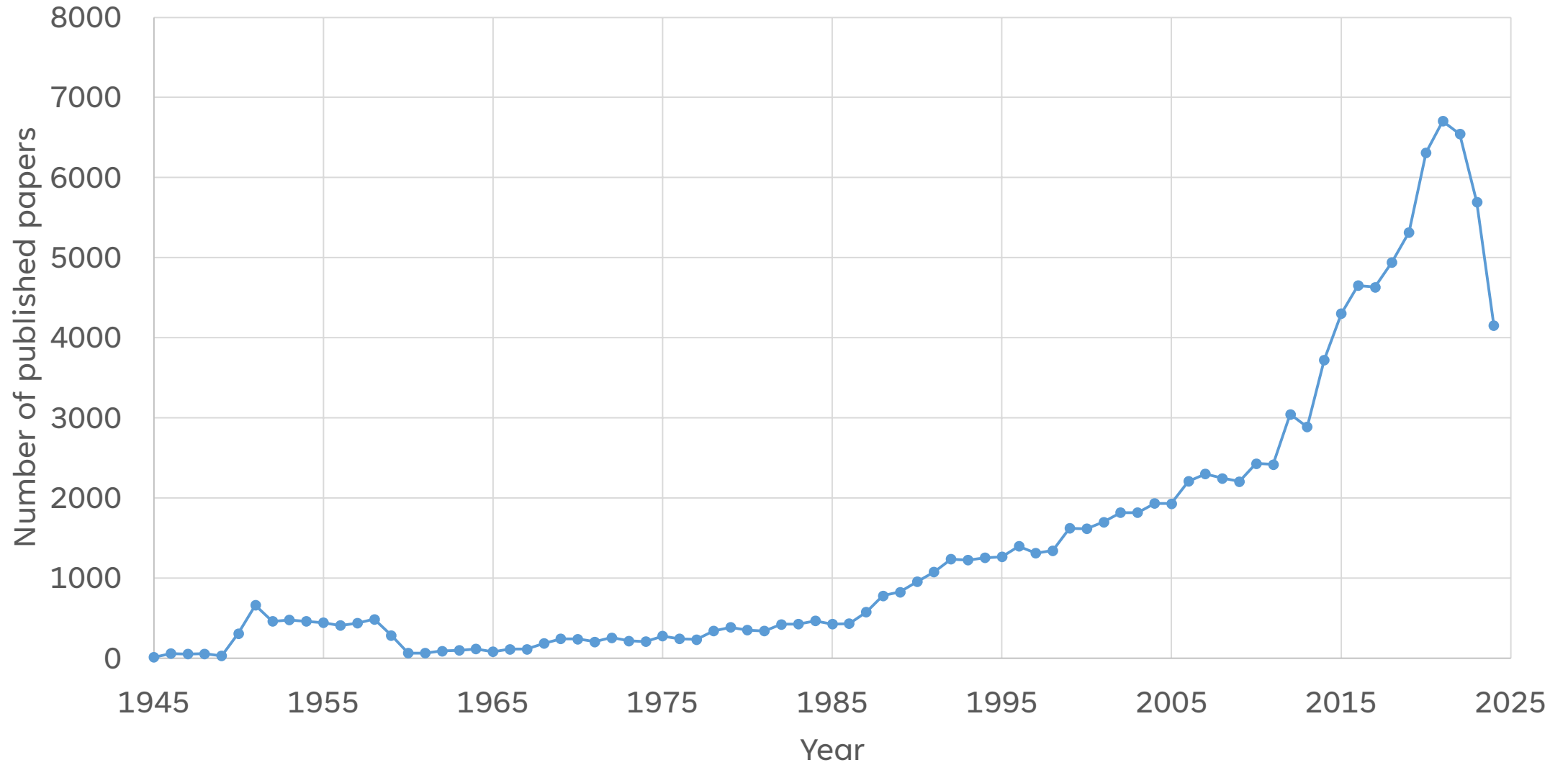
RESEARCH

<https://pubmed.ncbi.nlm.nih.gov/?term=%22occupational%20health%22&sort=date&timeline=expanded>

OCCUPATIONAL HEALTH RESEARCH – WHERE ARE WE?

See e.g. <https://web-archive.oecd.org/temp/2024-06-21/660908-more-resources.htm>

"Occupational health" in PubMed





WHAT WE NEED FOR OCCUPATIONAL HEALTH

The World Health Assembly urges countries to

- **Develop** national **policies and action plans** and to build institutional capacities on occupational health,
- **Scale up** the coverage with essential **interventions** for prevention and control of occupational and work-related diseases and injuries and occupational health services
- **Ensure** in collaboration with other relevant national health programmes such as those dealing with communicable and non-communicable diseases, **prevention** of injuries, **health promotion**, mental health, environmental health, and health systems development.

Source: <https://www.who.int/health-topics/occupational-health>



WHAT WE NEED
FOR
OCCUPATIONAL
HEALTH IS
RESEARCH

Changes in policies, e.g. Working Time Acts in Finland and Sweden change the organization of working hours, globally 4-day week initiative

- Possibility for natural interventions, but long-term follow-up is needed

Action plans, e.g. the investments for the promotion of mental health by the EU

- Effects but especially effectiveness should be shown along with cost-effects


Scale up of interventions, e.g. web-based solutions, individual vs. group counseling while behaviors targeted vary considerably – i.e., smoking cessation, anxiety, physical activity, diet...

- Applicability to various contexts, workplaces, etc.?

URSULA VON DER LEYEN'S PLAN FOR EUROPE:

We need a new European Prosperity Plan to:

- Make business easier and deepen our Single Market;
- Build a Clean Industrial Deal to decarbonise and bring down energy prices;
- **Put research and innovation at the heart of our economy;**
- Boost productivity with digital tech diffusion;
- Invest massively in our sustainable competitiveness;
- **Tackle the skills and labour gap.**



WHAT WE NEED
FOR
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Development of methods

Data has become better:

- Large-scale studies with harmonized measures (usually survey data). Individual participant data (IPDs)
- Wearable technology: heart rate monitoring, muscle activity, leisure-time tracking of activities, movement sensors

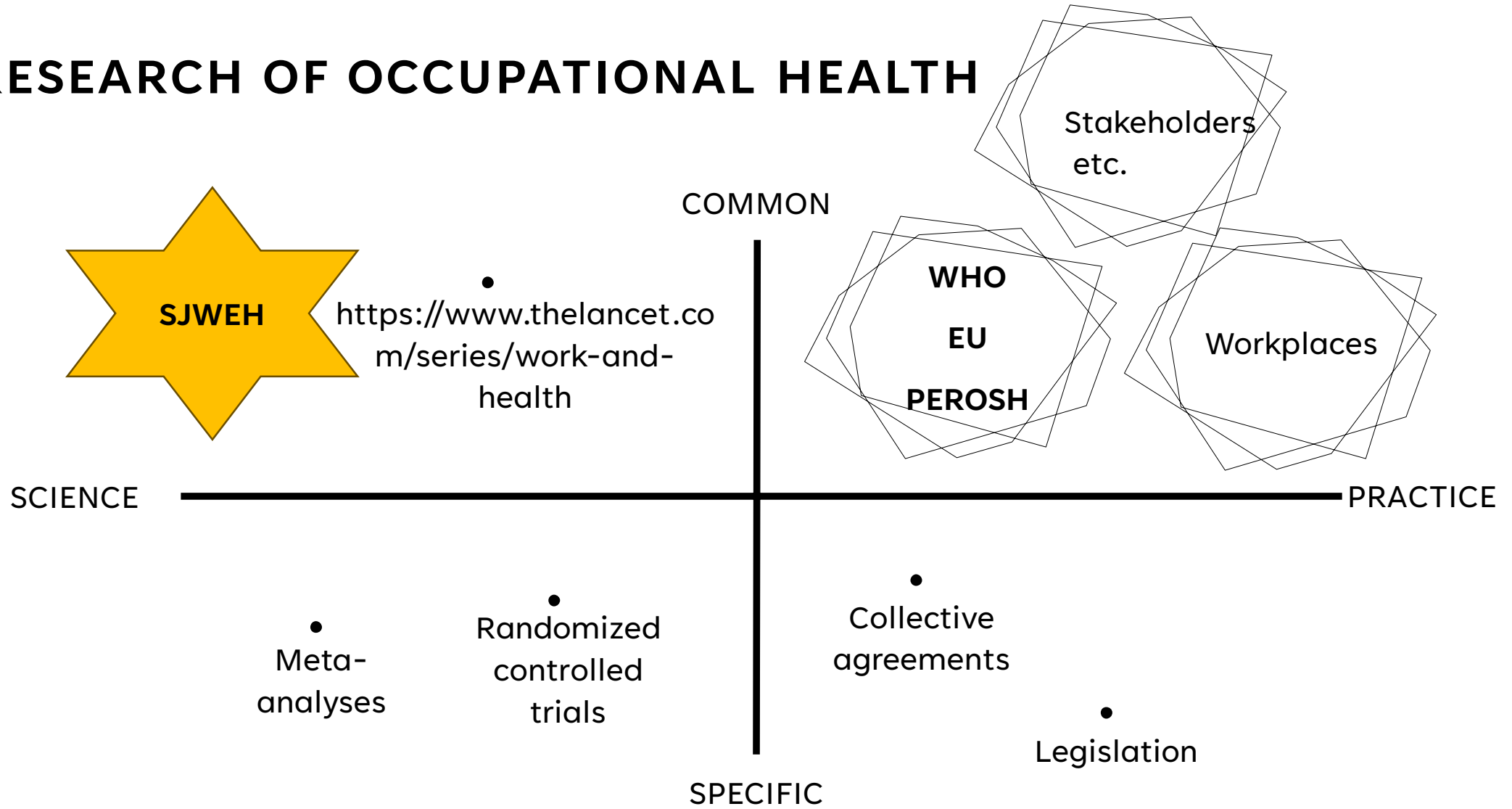
Designs have improved:

- Longitudinal designs
- Randomized controlled trials
- Natural interventions

Statistics have evolved

- Complex models with repeated data
- Machine learning models

RESEARCH OF OCCUPATIONAL HEALTH



SUMMARY

Rapidly evolving world calls good quality research for work and health to resolve existing and emerging occupational health issues. An independent journal with vigorous editorial board is essential to keep up with providing relevant knowledge for the international audience.

Thus, let's work together for Scandinavian Journal of Work, Environment and Health!