# LET'S GET SERIOUS ABOUT FATIGUE



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# MESSAGE FROM THE POLITICAL OFFICER FOR THE OCCUPATIONAL HEALTH AND SAFETY SECTOR AND OHS COMMITTEE

In the health sector, all healthcare professionals feel work-related fatigue at one time or another during their work week.

For example, 50.5% of nurses almost always feel fatigued. 80% of them feel fatigued after work. Long work hours, unusual schedules, heavy workloads due to understaffing, and a work environment impacted by several reforms are just some of the causes of nurse fatigue.

In other sectors, fatigue is viewed through the lens of occupational health and safety. For example, in the transportation sector, the Quebec Government limits the hours heavy vehicle drivers can drive in a work day and week for safety reasons.<sup>2</sup>

The health sector, however, continues to **turn a blind eye** to nurse, licensed practical nurse, respiratory therapist and clinical perfusionist **fatigue**. It's always been accepted as a necessary evil in this sector. Fatigue is inherent and normalized.

Studies<sup>3</sup> demonstrate that there's a link between fatigue and health problems in healthcare professionals. It is seen as a factor that contributes to medical errors and work accidents. One study reported that 38% of nurses made a fatigue-related near error.<sup>4</sup> Fatigue is also one of the reasons why 25% of healthcare professionals are considering leaving the profession.

Fatigue at work has many impacts on healthcare professionals, the health network and patients.

The 2019 OHS Week aims to raise awareness among healthcare professionals about the dangers of fatigue at work. They need to be able to recognize it, understand it and take action. The 2019 OHS Week is starting a discussion about fatigue at work, now: **Let's get serious about fatigue!** 

<sup>&</sup>lt;sup>1</sup> Canadian Nurses Association, Fact Sheet – Nurse Fatigue, online, https://www.cna-aiic.ca/-/media/cna/page-content/pdf-en/fact\_sheet\_nurse\_fatigue\_2012\_e.pdf?la=en&hash=CF6B0942E8C1C16C96A60067860C9CA2E8C280B5 (page visited on July 30, 2019) (PDF)

<sup>&</sup>lt;sup>2</sup> Regulation respecting the hours of driving and rest of heavy vehicle drivers, CQLR, c. C-24.2, r. 28

<sup>&</sup>lt;sup>3</sup> Nurse fatigue and patient safety: Research report (2010), published by the CNA and RNAO

<sup>&</sup>lt;sup>4</sup> Nurses who work a shift lasting more than 12.5 hours "are likely to make three times more errors" (Rogers et al., 2004, as cited in CNA & RNAO, 2010)

# **HOW CAN WE DEFINE FATIGUE?**

Fatigue can be described as a gradual decline of physical and mental alertness that leads to drowsiness or sleepiness. Fatigue becomes a problem when it jeopardizes a healthcare professional's ability to perform tasks that require alertness, judgement and good reflexes.

Fatigue is a biological condition that commitment, experience or motivation cannot overcome or offset.<sup>5</sup>

# Fatigue/work connection

Fatigue can be considered as a type of incapacity and, by the same token, a risk factor. For example, studies have shown that nursing staff who work 12.5 hours or more per day are at more risk of lacking alertness, making errors or hurting themselves.<sup>6</sup> Research finds that a lack of sleep is associated with a high risk of cardiovascular diseases, diabetes, hypertension and obesity.<sup>7</sup> Since this is true for nurses and licensed practical nurses, it is likely just as true for respiratory therapists and clinical perfusionists.

The code of ethics for each of these professions stipulates that healthcare professionals cannot practice their profession when in a condition that could compromise the quality of care and services. In this respect, while references to consuming drugs, alcohol and narcotics are much more common, **fatigue caused by a lack of sleep** is just as likely to compromise the quality of care.<sup>8</sup>

However, it is difficult to measure or quantify levels of fatigue. Raising awareness and observing changes in behaviour help in recognizing fatigue.<sup>9</sup>

<sup>&</sup>lt;sup>5</sup> SAAQ Fatigue Management Guide

<sup>6</sup> http://asstsas.qc.ca/sites/default/files/publications/documents/OP/2013/op362024.pdf

<sup>7</sup> Ibia

bttp://www.figsante.gc.ca/comite-sst/en/2017/05/16/lack-of-sleep-and-impaired-faculties-the-same-thing/

<sup>&</sup>lt;sup>9</sup> https://www.cchst.ca/oshanswers/psychosocial/fatigue.html

# **RECOGNIZING FATIGUE**

# **Signs and symptoms:**

#### **MENTAL**

- Decreased efficiency and performance
- Difficulty concentrating
- Lapses in attention
- Memory lapses

- Increased anxiety
- Failure to communicate appropriately
- Failure to anticipate
- Errors of commission
- Errors of omission



#### **PHYSICAL**

- Yawning
- Heavy eyelids
- Eye rubbing
- Head drooping
- Inappropriate sleep onset
- Decreased hand-eye coordination
- Slowed reaction time

#### **EMOTIONAL**

- Feeling empty
- Feeling exhausted
- Feeling withdrawn, isolated
- Feeling lethargic
- Lacking motivation
- Feeling irritable

# **CONTRIBUTING FACTORS**

Fatigue is multidimensional. Here are four contributing factors:

# **Psychological factors**

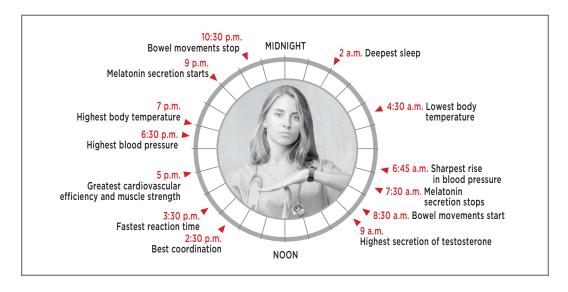
Stress is one of the psychological factors. Someone who feels a lot of stress has difficulty concentrating, making decisions and feeling confident. Stress can also have long-term consequences on physical health. Fatigue is also a consequence of long periods of stress.<sup>10</sup>

# **Physiological factors**

#### CIRCADIAN CYCLE<sup>11</sup>/BIOLOGICAL CLOCK

Some people, as a result of fatigue-related stress, have physical symptoms like sweating, accelerated heart rate and high muscular tension.<sup>12</sup>

Moreover, our bodies have an internal clock, also known as a biological clock. This clock manages our body temperature, hormone secretions, sleep cycles, heart rate, blood pressure and digestion. It is regulated by light and dark and follows a 24-hour cycle. Even a well-rested person's low points in the circadian cycle are between midnight and 6 a.m., and 1 p.m. and 3 p.m. During these periods, our metabolism slows down, we are less alert and fatigue sets in.<sup>13</sup>



<sup>10</sup> https://www.cchst.ca/oshanswers/psychosocial/fatigue.html

<sup>&</sup>lt;sup>11</sup> The word "circadian" is from the Latin circa, "around," and dies, "day," and literally means cycle that lasts "around one day."

<sup>12</sup> https://www.cchst.ca/oshanswers/psychosocial/fatigue.html

<sup>&</sup>lt;sup>13</sup> https://saaq.gouv.qc.ca/fileadmin/documents/publications/driver-fatigue-guide.pdf (page visited on July 30, 2019)

Some work shifts are especially difficult because they require a high degree of concentration and activity when the body is in a low point in its circadian cycle.

#### **Behavioural factors**

#### LACK OF SLEEP

Most people need 7 to 8 hours of uninterrupted sleep per 24-hour period, on a regular basis. A person's ability to fulfil their sleep needs will depend on the amount of time between shifts, calendars or schedules and on the time of day when they have time off. Restorative sleep happens in a calm place, is uninterrupted and, preferably at night between 10 p.m. and 7 a.m.

A study done by Statistics Canada from 2007 to 2013 shows that almost a third of night-shift workers sleep approximately 5 to 7 hours less per week than day-shift workers. Sleeping less than you need creates a sleep deficit. In contrast, it is impossible to accumulate a sleep surplus.

Whether intentional or imposed, a lack of sleep can only be compensated by sleep!

#### **Environmental factors**

Work requirements are part of environmental factors. A survey<sup>14</sup> conducted by the Canadian Nurses Association (CNA) and the Ontario Nurses' Association (ONA/RNAO) identified the top five factors contributing to fatigue in the health sector:

- 1. Increased workload
- 2. Understaffing
- 3. Increasing expectations from patients and families
- 4. High levels of patient acuity
- 5. Unexpected emergency with staffing or patients

The increased workload and short staffing are key factors behind the FIQ's ratio project initiative, actions to raise public awareness around the unbearable conditions of mandatory overtime, and members' pressure tactics to obtain government commitments, and concrete changes from the network's managers.

https://www.cna-aiic.ca/-/media/cna/page-content/pdf-en/fatigue\_safety\_2010\_report\_e. pdf?la=en&hash=AB24ABDD277F83524AA6F7083298FC3B35221070

# RESTORATIVE SLEEP

There is no one way to get a good sleep. What works for one person may not work for another.

### Here's a list of simple suggestions:

- Go to bed and get up at the same time every day.
- Exercise regularly.
- Eat a balanced diet, at regular intervals, that includes fruit, vegetables, whole grains, healthy fats and protein.
- Avoid using electronic devices in bed that emit blue light, this includes TV, computers and cell phones.
- If you have insomnia, do not try to fall asleep. Get up and read or do a quiet activity.
- Avoid caffeine, tobacco and alcohol, especially before bedtime.
- Turn off your phone ringer and mute your answering machine.
- Ask family members to be respectful if one person is sleeping. They can use headphones for watching TV, listening to the radio, etc.
- Make your bedroom as dark and calm as possible. Use dark, heavy curtains, blinds or wear a sleeping eye mask. Soundproof your room if possible or wear ear plugs.
- Most people sleep better in a cool room temperature. Consider using an air conditioner or a fan during the summer months.

#### RISKS AND IMPACTS OF FATIGUE AT WORK

# For healthcare professionals, fatigue:

- Impairs judgement.
- Impairs decision-making ability.
- Slows reaction time and makes it difficult to concentrate.
- Increases the risk of clinical errors.
- Increases the risk of falling asleep at the wheel when driving home.
- Affects personal relationships, makes them more difficult.
- Lowers the quality of exchanges with their colleagues, patients and families.

#### **SLEEP HYGIENE**

# Did you know that there's a link between time awake and weakened faculties?

- After 17 waking hours, our physical and mental faculties decline significantly. The decline
  in faculties is comparable with intoxication levels usually associated with alcohol abuse.
- Some studies have shown that "when workers get less than 5 hours of sleep before working or if they are awake for over 16 consecutive hours, the risk of fatigue-induced errors at work increases significantly."<sup>15</sup>
- These studies also show that the number of hours awake can be similar to blood alcohol levels.<sup>16</sup>

16 hours awake = 0.05 blood alcohol content

21 hours awake = 0.08 blood alcohol content

25 hours awake = 0.10 blood alcohol content

<sup>15</sup> https://www.ccohs.ca/oshanswers/psychosocial/fatigue.html (page visited on July 30, 2019)

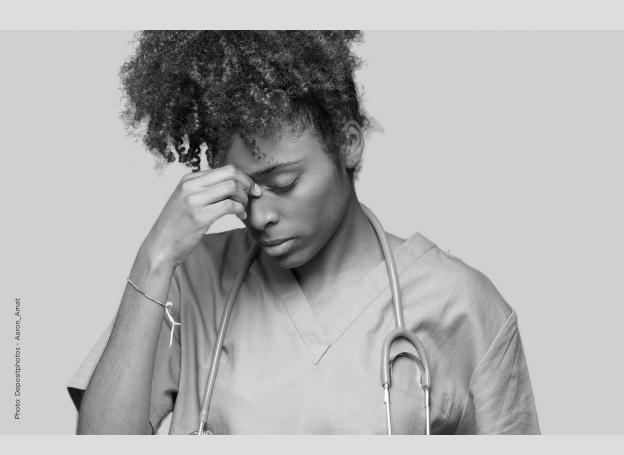
<sup>16</sup> Ibid

# Fatigue also has consequences for employers, including:

- Increased work accidents
- Increased absenteeism among care staff
- Poorer work performance
- Possible workplace deterioration

# **Concerns for patients include:**

- Patient safety and well-being
- Safety of patients' families



# **ACTIONS**

#### What actions should be taken?

#### **HEALTHCARE PROFESSIONALS NEED TO:**

- Know how to recognize their own fatigue and which solutions to use.
- Accept their share of responsibility for alleviating and managing fatigue, in particular by knowing how to refuse assignments in a professional way.
- Comply with their ethical obligations to maintain the ability to practice when the employer plans activities unrelated to their work.
- Work through their local unions and the FIQ to encourage the provision of safe patient care using work scheduling methods that promote workplace safety.
- Schedule periods of sufficient rest.

#### THE EMPLOYER:

Until a fatigue risk management system is put in place, the employer can immediately implement measures to:

- Ensure that healthcare professionals can get at least 8 hours of sleep between their shifts.
- Encourage healthcare professionals to develop good sleep habits.
- Limit consecutive night shifts to 4 days, or to 2 days if they are 12-hour shifts.
- Allocate at least two days off after night shifts.
- Ensure that rotating shifts begin in the morning, followed by afternoons and then nights, and not the opposite.
- Avoid extended schedules and overtime.
- Allow for a sufficient number of quality breaks.
- Take people's individual traits into account, i.e., some people are more efficient in the morning, others in the evening.
- Develop policies that provide time and space for periods of rest, meals and other health promoting initiatives related to sleep hygiene.
- Allow staff to take naps at work to enable them to rest up and work better.

- Create processes to collect data on fatigue at work and its relationship to overtime, maximum hours worked per day and per week, on-call hours as well as data on patient errors, staff retention levels and recruitment outcomes.
- Adopt safe work policies and scheduling practices for healthcare professionals that limit the hours worked to (1) 12 hours per day, without including file transferring and on-call hours and (2) 48 hours per period of seven days, including on-call periods.

Prevention and reduction of fatigue-related risks in the workplace help everyone.

# Getting serious about fatigue means having:

- An approach to reduce workplace accidents and incidents.
- Ways of reducing absenteeism.
- Better healthcare professional stability.

# **Getting serious about fatigue to:**

- Better recognize it.
- Better understand it.
- Better identify it.
- Take action.

Happy 2019 OHS Week!

Notes	





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