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Shirley Wylie, RN, DOHS

Executive Director's Message

Make plans now to join us at Keeping Workers Well 2018

It's spring – a time of renewal. With this in mind, OOHNA members are invited to make plans to join their colleagues to celebrate life-long learning at **Keeping Workers 2018**.

The 47th Annual OOHNA Conference will be held May 31- June 1 at The Centre for Health & Safety Innovation, Mississauga, Ontario. Take a few moments now to review the information in this issue of the *OOHNA Journal* to familiarize yourself with the impressive program of speakers and exhibitors so you can plan your time at conference to maximize your learning experience.

The focus of this year's conference is the legal and legislative changes that are impacting OHNs as you deal with occupational health and safety within your working environments.

With change comes opportunity, and the guest editorial in this issue by noted mental health champion, Mary Ann Baynton, gives a hint of the many opportunities ahead OHNs. She will expand on this theme during her session *Psychological Health and Safety: Potential Role for the OHN* at the OOHNA Conference.

Mental health is addressed as one of the themes in this issue in articles by Dianne Dyck, Margaret Oldfield, and Neal Berger, who

discusses *Recovery Oriented Systems of Care*.

Readers have identified diabetes as a "need to know" topic – be sure to read both articles dealing with this subject: one by a Registered Dietitian, and the other, from an OHN's perspective.

Attending the annual OOHNA Conference is beneficial for two reasons: education (and CE credit hours) and networking (with colleagues, exhibitors, and sponsors). Make plans now to join us for this wonderful education and networking event - I look forward to seeing you at **Keeping Workers Well 2018**.



Mary Ann Baynton

Guest Editorial

Championing Psychological Health and Safety: The Important Role of the Occupational Health Nurse

Occupational Health Nurses (OHNs) interact with employers and employees, as well as managers, supervisors and individuals, to promote and restore employee health, safety and well-being. According to the Ontario Occupational Health Nurses Association (OOHNA) guidelines, this includes assessing the work environment, providing health education programs and promotion, conducting health surveillance programs, monitoring injury and illness trends, policy development, and much more. This is in addition to important, traditional nursing services an OHN provides every day.

When I look at the guidelines, I'm immediately struck by how closely they align with the framework of the National Standard of Canada on Psychological Health and Safety in the Workplace (the Standard).

Thanks in part to the Standard, more employers are seeing the value in assessing and addressing psychological health and safety in the workplace, but many don't know where to start, or who should lead. I believe, as I consider the important role of the OHN, that you are especially well-equipped for this role.

I understand how busy you all are. You might immediately say to yourself: "No thanks, I've got

enough going on." I understand that. Before dismissing the idea completely, take a moment and consider that being the go-to person for psychological health and safety might actually improve your position within your organization.

Adopting the Standard – and being the person at the helm – means you're looking beyond individual employee issues and focussing on the bigger picture. This includes taking a critical look at the systems, procedures and policies that contribute to illness or injury in your workplace.

You'd become the person who gets the data, completes the analysis, makes the recommendations for change, and then helps to execute that change. Not only could your profile and impact significantly increase, but you can truly make a positive difference in protecting the health and well-being of those you serve.

At the upcoming OOHNA Conference on May 31, 2018 I'll share some ideas on how you can take on this role while still managing the rest of your job. Some of the things we'll talk about include: leveraging free resources to stay within budget, learning how to lead and delegate instead of taking on all the work yourself, key challenges and how to avoid them, how to build on existing

good work by embedding psychological health and safety into current processes, and how to plan for the unexpected.

Part of my discussion will focus on how you can get the leaders in your organization to start asking themselves *“how might this impact the psychological health and safety of employees?”* before making decisions, creating or revising policy, introducing change or interacting with employees.

We'll also look at how you can support capacity building of leaders in your organization – which is especially important for two reasons.

First, recent national surveys show that leaders are more likely to experience depression and stress than the average employee. If you take a preventive approach to supporting the well-being of leaders, you help solidify your position as part of the management team.

Second, you may be tasked with dealing with the skepticism of others when an employee is deal-

ing with a mental health problem. By sharing effective approaches to support employee productivity, even during times of mild to moderate mental illness, you build the respect and gratitude of leaders. And by building up the ability of a leader to resolve employee issues more effectively, you reduce the stress on the leader and their teams.

Over the past 15 years, I've worked with many OHN's. Each has been a dedicated and intelligent individual who has the professional ability to identify possible causes of employee stress and psychological harm in their organizations, yet some felt powerless to intervene at the organizational level.

I've also worked with those who have taken charge – indi-

viduals who've spoken up, highlighted changes that need to be made in their organizations and championed that change. Both myself and the Great-West Life Centre for Mental Health in the Workplace have been inspired by these nurses who aspire to make a difference. We want to provide you with strategies and resources that can help you do the same, and achieve positive, successful results.

I encourage you to learn more about implementing the Standard, and what it could mean to your organization. As an OHN, you're uniquely positioned to make a positive difference.

Mary Ann Baynton, MSW, RSW, is Program Director, Great-West Life Centre for Mental Health in the Workplace.

As an OHN, you're uniquely positioned to make a positive difference.

The brochure features a dark blue border with abstract green and blue wavy lines in the background. The OOHNA logo, consisting of a series of blue dots forming an arc above the text 'OOHNA', is in the top right. The main text is centered and reads: 'ONTARIO OCCUPATIONAL HEALTH NURSES ASSOCIATION', 'KEEPING WORKERS WELL', '2018 CONFERENCE BROCHURE', '2018' (in large green font), '47th Annual Conference', 'Thursday, May 31 to Friday, June 1, 2018', 'Conference Centre', 'The Centre for Health & Safety Innovation', and '5110 Creekbank Road, Mississauga, Ontario'. In the bottom left, there is a green circular graphic with the text 'Register Today!' inside.

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AT WORK AND IMPAIRED? by Dianne Dyck

Many workers would be hard-pressed to swear that they have never been at work and impaired. Now, I am sure that this bold statement will raise a few eyebrows, but think about it.....

Impairment is defined in the 2017 Meriam-Webster Dictionary as experiencing a state of diminished, reduced or damaged state of being. According to the 2017 Meriam-Webster Dictionary, *impairment* is “[being in] an imperfect or weakened state or condition: such as [being] diminished in function or ability: lacking full functional or structural integrity; [or] being unable to function normally or safely (as when operating a motor vehicle) because of intoxication by alcohol or drugs.”

The purpose of this article is to explore the term *impairment*, to identify its relevance in today's workplaces, and to discuss what the OHN can do mitigate the negative impacts of the impaired worker.

Impairment

Impairment stems from many sources. Most people relate impairment with a disease state, or an injury, or a substance-related condition. Of course, those are the obvious sources; yet, there are more to consider.

The World Health Organization (WHO) recognizes impairment as being “a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations” (2017). This broader definition encompasses more than the traditional sources of impairment, and includes

the negative effects of fatigue, shift work, prescription medication use, over-the-counter medication use, medication interactions, and aging.

Disease State

Illness and injury can result in work-related disability, that is, the inability to uphold a functional role in society. This form of impairment can manifest as activity impairment and/or participation restrictions (WHO, 2017). Workers are away from the workplace or functioning in a reduced capacity. In either situation, worker productivity is reduced.

Substance-induced State

As the result of substance use, the worker can be working but functionally incapacitated. The degree of impairment varies depending on the dosage, the properties of the substance, the gender and age of the user, the length and time since taking the substance, the worker's level of tolerance for the substance, and/or the nature of the activity. Activities involving concentration, fine motor skills, information processing, deductive reasoning, quick response time, and memory are often the most impacted.

Fatigue State

In today's economy, many people work two or more jobs to survive. Our society is recognized as being chronically sleep-deprived: “Canada is the third most sleep-deprived country, with nearly a third (31%) of the Canadians feeling like they don't sleep enough” (AVIVA, 2016). According to the Canadian Men's Health Foundation, a third of the working males get four to six hours of sleep each

night (2016).

Fatigue, due to the lack of sleep, is strongly associated with functional and cognitive impairment: vigilance, cognitive performance, memory, problem-solving, planning, and even the use of language (verbal fluency), can be negatively impacted (Nijrolder, 2008; Alhola, 2007; Durmer, 2005; Miller et al., 2014).

These types of impairment are known to be associated with workplace incidents, such as transportation accidents, injuries, medical errors, reduced quality of care, and errors in judgement (Miller, 2014). However, these impairments also reduce worker productivity: attention to detail, learning and creativity are all negatively impacted.

The term, *presenteeism*, is used to denote the employee's presence at work, but reduced productivity due to fatigue, illness, injury and/or psychological disturbances. Presenteeism has been reported to cost employers nine times the cost of employee absenteeism (Aldana, 2009).

Shiftwork encompasses an alteration in the worker's circadian rhythm, as well as sleep alterations. Both can negatively impact the worker's ability to remain alert, to make decisions, to remember details, and to respond in a timely manner (Miller et al., 2014).

Diminished Capacity State

With over 20% of today's full-time workforce being over the age of 60 years, workplaces are witnessing the effects of aging. Aging is manifested by:

- increased morbidity due to sleep deprivation, chronic health conditions, increased use of medication; and
- functional inability to undertake

their previous job tasks.

For example, the older worker is more likely to experience changes in vision, hearing, muscle strength, mobility, motor performance, fine motor skills, perceptual abilities and response times (Voelcker-Rehage, 2008). Likewise, with aging, comes sleep changes and the related cognitive decline (Miller et al., 2014).

Risk Management: The Employer Role

Risk management involves making and implementing decisions to minimize possible adverse effects of accidental and business losses on an organization. It is the systematic application of the organization's planning, organizing, leading, and controlling functions to:

- anticipate and identify accidental loss exposures;

- evaluate the related risk;
- work to avoid or eliminate hazards; and
- attain an acceptable level of risk. (Dyck, 2017)

Risk, in this sense is defined as a state in which losses are possible. It can be defined as the probability of loss of that which we value (Covello, 2018). Risk can also be perceived as an opportunity that can present either as a gain, or as a loss (Dyck, 2017).

In terms of disability management, the noted risks to Canadian employers are high annual rates of employee absences, legal obligations, financial losses, and societal expectations. There are many pieces of legislation that

impact and influence the field of disability, namely the Canadian Human Rights Legislation, Workers' Compensation Acts, privacy legislation, Occupational Health & Safety Acts, Employment Standards, Labour Law, etc.

According to Statistics Canada, full-time employees miss, on average, 7.8 workdays per year due to medical reasons, and 1.7 days due to family reasons (2016). As such, Canadian employers face a risk of lost productivity for an average of 9.5 days. Given that the average hourly wage for Canadian full-time employees is \$27.86, this translates to \$2,117.36 per employee per year (Statistics Canada, 2017).

Worker permanent disability

Occupational Health Nursing is “risk management” operationalized



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puts employees at risk for withdrawal from the workforce and premature death (Scott-Marshall, 2015). This is a human capital loss and financial risk for the employer. Financial risks stem from the number of financial losses that the employer faces when an employee is away from work for medical reasons. Lost productivity, business interruption costs, disability claim costs, supplementary health care costs, worker replacement costs, time lost in rearranging work schedules, and increased insurance premium rates are but a few of the potential financial losses.

Societal expectations emanate from Canada being a country with a strong “social conscience”; as such, employers are expected to “do the right thing” by their employees. If they are perceived to fail in this expectation, then their corporate image and reputation suffers.

Today, the interest in risk management is higher than it has ever been (Meltzer, 2005). Each year organizations/companies experience extensive security, product, people, property, and reputation losses. As a result, they turn to the field of Risk Management; the intent of which is to manage these business risks, thereby minimizing real and potential losses.

Risk management is ultimately the responsibility of the board of directors or senior management of an organization/company. They must decide the level of their “risk appetite”, their preferred system for risk controls, and how they will make management accountable for risk management within the organization and risk communication (Meltzer, 2010).

The corporate governance issues that they need to address are:

- compliance versus due diligence;
- use of a checklist approach to

- risk management or not;
- the potential penalties for directors and officers;
- the potential impact that specific investment decisions might have on the organization; and
- the separation between risk management audit and risk management consulting functions (Meltzer, 2010).

Risk Management: The OHN Role

Occupational Health Nurses (OHNs) are involved in risk management situations and provide risk communications daily. In fact, an Occupational Health Program and Disability Management Program are risk management tools: they are a human resource “risk management approach” aimed at promoting employee well-being, preventing employee illness/injury, and mitigating employee medical absences and their related costs. They function to preserve human capital.

Occupational Health (OH) Nursing is “risk management” operationalized. Synonymous with every aspect of an Occupational Health and Safety Management System (OHSMS), OH Nursing risk management is aimed at minimizing the costs of pure risk at a reasonable cost. It is an administrative, managerial function like standard OH&S hazard identification and loss control practices, but more sophisticated and focused on potential risk.

Likewise, Disability Management serves a risk management function. A Disability Management Program is designed to control the human and economic costs of employee injury/illness, to convey a message that employees are valued, and to demonstrate compliance with the relevant legislation. As such, it is a risk management and risk communication approach designed to integrate all corpo-

rate programs and resources to minimize or reduce the losses and costs associated with employee medical absence regardless of the nature of those disabilities, as well as to prevent future occurrences.

Risk Management: Management of Worker Impairment

Worker impairment is a major concern for Canadian employers. To effectively manage this risk, organizations are advised to use a combination of risk management approaches. The employer must uphold their legal duty to provide a safe and healthy workplace, as well as meet their business strategies and obligations. The OHN can assist the employer with these endeavours.

The employer must have policies and procedures addressing situations when worker impairment occurs. For example, an Occupational Health & Safety policy; OH&S program; safe work and operating procedures; and enforcement of each. The employer needs to ensure that work conditions such as work hours, work demands, pace of work, shiftwork, and travel requirements are evaluated in terms of their health impacts. If deemed hazardous, then the employer is obligated to remedy the situation as part of their OH&S legal obligation. Likewise, the employer must ensure that adequate resources and expertise exist to enable the identification and management of worker impairment.

The OHN is qualified and if positioned to do so, can take a leadership role in the management of worker impairment. In terms of health and safety promotion, and disease prevention, the OHN can support the workplace by:

- Ensuring workers are fit-to-work;
- Ensuring the worksite is free of uncontrolled hazards;

- Medically monitoring workers exposed to known hazards;
 - Conducting risk assessments;
 - Communicating the nature and severity of identified risks;
 - Conducting human factor/ergonomic assessments and identifying suitable remedial actions;
 - Participating in planning emergency response activities;
 - Facilitating critical incident stress debriefing post-incident; and
 - Assisting with the management of strategic OH&S issues.
- In essence, OHNs contribute to promoting and maintaining worker health and safety, as well as workplace safety. By controlling losses, OHNs contribute to the enhancement of the organization's profits.

Disease State

OHNs have a key role to play in the areas of injury/illness management and disability management. Through client advocacy — the activity associated with pleading or representing an employee's or organization's cause, OHNs act as a client liaison — the position of responsibility within an organization for maintaining communication links with external individuals, agencies or organizations. This translates into reputation management for the employee and organization.

OHNs are ideally educated, skilled, experienced and positioned within an organization to facilitate injury/illness management and disability management. They are competent at:

- Mitigating the workplace illness/injury through timely response and referral for medical treatment;
- Determining worker fitness to work;
- Managing injury/illness cases;
- Co-managing insurer (government/private insurers) responsibilities and actions;
- Coordinating disability management assistance;
- Assisting workers to successfully return to work in a safe and timely manner;
- Negotiating service provider contracts and activities;
- Evaluating the outcomes and determining the return on investment for the organization/company; and
- Conducting trend analyses with a view to illness/injury prevention and the introduction of suitable loss control measures.

The outcome is an assurance that the worker is fit to work, as opposed to being impaired due to the impact of illness/injury.

Substance-induced State

OHNs, as health professionals, are qualified to undertake a systematic, rational method of planning and providing individualized nursing care. A patient-centred, goal-oriented method of "caring", the nursing process involves five major steps:

- Assessment (of company/worker's needs);
- Diagnosis (of human response needs that nursing can assist with);
- Planning (of company/worker's care);
- Implementation/intervention (of care); and
- Evaluation (of the success of the implemented care).

This problem-solving process enables the OHN to determine the degree to which the substance-induced state impairs the worker's

performance. Knowing the physical and cognitive demands of the worker's "own" job, the OHN can determine the degree of dissonance between the work demands and the worker's capabilities. If deemed impaired, then the OHN can activate corporate policies to eliminate the risk of having an impaired worker at the workplace. Secondly, the OHN can assist the employee to obtain appropriate medical and psychological assessment and treatment. Thirdly, when deemed recovered, the OHN can determine if the worker is indeed fit to work in his/her "own" job.

Fatigue State

As already noted, fatigue is pervasive and a real health risk in Canadian workplaces. The OHN can address worker fatigue through:

- Management/Union education on the negative impacts (short-term and long-term) of sleep deprivation;
- Worker education on the negative impacts (short-term and long-term) of sleep deprivation;
- Worker health surveillance¹ and assessment of fitness to work;
- Early intervention when required;
- Worker referral and treatment when appropriate; and
- Evaluation of the outcomes of action, in terms of the worker's fitness to work.

As for shiftwork, the OHN is well-versed on the health impacts of shiftwork. A combination of governance, stewardship, education, and health surveillance can be used to protect workers and the organization from the negative health effects associated with shiftwork.

¹ *Health surveillance* is defined as a system of ongoing health checks, some of which are legally required. The value added to employers includes the early detection of illness/injury, gathering health risk information, identifying how work is impacting employee health and safety, detecting risks to worker health, and educating workers on workplace health and safety.

Diminished Capacity State

The aging workforce is a new workplace phenomenon. To effectively manage the related health effects of impairment, the OHN can intervene by providing:

- Management/Union education on aging and how to counteract the related impacts;
- Worker education on aging and ways to protect themselves against the related body changes;
- Worker health surveillance and assessment of the older worker's fitness to work;
- Early intervention when required;
- Worker referral and treatment when appropriate; and
- Evaluation of the outcomes of action, in terms of the worker's fitness to work.

Conclusion

Worker impairment can be addressed, but it takes knowledge, expertise, and available resources. Regardless of the cause, impairment can be effectively identified and addressed by OHNs using the OH Nursing process and practices.

Dianne Dyck (degdyck2@gmail.com) is a Certified Occupational Health Nurse and Occupational Health & Safety Specialist who has worked for private and public-funded agencies to develop Occupational Health, Occupational Health & Safety, Disability Management, and Workplace Wellness programs. As an educator, Dianne has developed a number of courses in the fields of Disability Management, Occupational Health & Safety, Human Resources (Integrated Workplace Health Management). Her current publications are *Disability Management: Theory, Strategy and Industry Practice 6th ed.* (2017), *Occupational Health & Safety: Theory, Strategy and Industry Practice 3rd ed.* (2015), and *A Practical Guide to Psychological Health & Safety in the Workplace* (2015). Dianne also teaches the Integrated Disability Management Programs at the University of Fredericton.

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RECOVERY ORIENTED SYSTEMS OF CARE (ROSC) by Neal Berger

The word “recovery”, so often heard repeated in conversations regarding various aspects of substance use, needs to be understood in a new way. Often, when one hears someone say they are “in recovery” the immediate assumption is that the individual speaking is someone who had an addiction problem but is now “abstinent” from the substance. Recognizing that addicts have drug solutions, not drug problems and that merely becoming abstinent is likely to result in relapse, an expanded understanding of “recovery” was needed. The Betty Ford Consensus Panel was one of the first groups to undertake the task of defining recovery in more useful (and measurable) terms. The American Society of Addiction Medicine and many professional groups, including the Canadian Centre of Substance Abuse have adopted variations of the Consensus Panel’s original work. Recovery is now generally defined as a sustained period of voluntary abstinence from non-prescribed mood-altering substances, improved physical, mental and emotional health and good citizenship. This new understanding of recovery as something much more complex than abstinence points the way to a new way of responding to addiction.

When professionals and others assume that getting someone “off” drugs is the appropriate goal of “treatment,” we tend to focus on short term solutions that may be necessary but are desperately insufficient. Ray Baker, MD, FCFP, FASAM with over 30 years of work in occupational health and addiction medicine wrote. “We attempt to treat addictions by

Not just a new label for addiction treatment but a new “Mental Model” for how to think about the myriad of health problems, organizational and societal issues related to addiction disorders.

using an acute care model using brief bouts of intensive specialized treatment. Often experiencing frustration when our patients relapsed requiring yet another expensive bout of intensive, specialized treatment.” (2017). The new model must first recognize that addiction is a chronic disease. Again, Dr. Baker writes “patients suffering from other chronic diseases like diabetes, hypertension and atherosclerotic heart disease receive stepped, longer-term disease management beginning with specialized evaluation and stabilization then shifting to community-based supportive continuing care. Addiction treatment programs with superior outcomes engage clients for a much longer period, understanding that initial intensive treatment (diagnostic assessment, stabilization, withdrawal management, motivation/psychoeducation, medication management) is merely the initiation of recovery, or the beginning of the journey. They engage their clients using motivational interventions, utilize community and family reinforcement techniques, assertively link their clients to mutual support groups, and arrange for monitoring using contingency management and offer family education and support programs” (Ibid).

The *Canadian Life in Recovery Survey 2015-2017* developed by the Canadian Centre on Substance Abuse and Addiction (CCSA) under the direction of the National Recovery Advisory Committee (NRAC) and with oversight from the Recovery Expert Advisory Group sought to better understand how those individuals, identified as suffering from addiction disorders, found their way into recovery, and what are the salient factors that allow them to maintain their recovery. This first research of its kind in Canada, yielded some valuable information, including the surprising fact that a majority of respondents reported that once in recovery, they had experienced no relapses – regardless of the drug of choice. This research also provides some insight into where resources might best be placed. The findings in this research also serve to help confirm why some programs have consistently produced outstanding outcomes in terms of assisting employees or members with addiction disorders.

Making a shift from providing for acute care settings for addicts to establishing a truly effective Recovery Oriented System of Care requires, I believe, that we examine those organizations who pro-

vide long term experience that has seen them responding to addiction in a way that consistently results in positive recovery outcomes a very high percentage of the time.

For purposes of this article, I am going to focus on workplaces or work organizations. The basic principles of a recovery-oriented system of care are applicable across the full range of society but I think when we start with successful workplace programs it makes the extension of these principles possible in the less well-defined organization called "society".

Historically, a few employment groups in North America have demonstrated the ability to develop policy supported addiction programs that have produced excellent results. The groups most often cited are programs that target health care professionals, especially physicians and nurses; some programs that provide assistance to lawyers; and employment groups involved in transportation. More recently, groups where the performance of the work is designated as "safety sensitive" are showing very good results using similar strategies.

The group that I am especially familiar with and, have had extensive experience with in both helping to develop programs and in providing the acute phase of the care continuum, is air line pilots. I will use one of these groups as a template for understanding what seems to be the essentials of an employment driven Recovery Management System (RMS) that is consistently successful.

For the past 11 years, I have been the director of a multi-disciplinary treatment facility in Western Canada. One of the airline pilot programs we have been privileged to work with has provided addiction treatment for 28 individuals. Twenty-six of these were reinstated in their positions and

remain so today. The recovery of these individuals was managed carefully by the system in place and none of them experienced a relapse. The key understanding of this outstanding result is that while they were provided with a very good facility to address the initial, critical and necessary tasks of recovery, the success this group experiences has less to do with the treatment (acute care) we provided and everything to do with the overall continuum of care that is driven by the recovery management system described and provided by the workplace itself.

There are some key elements that are foundational to this program's success. Other successful programs (those that see once-addicted employees returning to work as healthy individuals in recovery) seem to have their own variations of these elements. Legislative acts and institutional and professional regulations will influence how another group would structure a program for similar results. Obviously, one size will not fit all but the basics of a sound recovery management system appear to hold true. It should be noted that the best policies and procedures still have to be supported by outstanding, individuals, dedicated to the effort and willing to experience personal growth throughout the process.

Workplace Culture. The culture in this workplace, as a result of training and experience, is one where addiction is generally understood to be a treatable illness. Whether a friend, co-worker, supervisor or job steward, employees who are believed to have mental health or addiction difficulties are met with empathy, compassion and concern. The concern arises as individuals in the workplace understand the seriousness of this disease and that assistance at the earliest possible opportunity

is essential. They understand that "covering up" or not allowing people to be accountable for their behavior could help pave the way to much more serious problems – for everyone. The war on drugs, waged in the US has had some very negative cultural consequences. It created an environment where addicts are "bad" people. Efforts in drug testing were seen to be efforts to "catch" the bad people. This cultural shift was to create tension, fear, resentment and individuals were far more inclined to help a friend or a co-worker avoid "getting caught" than they were inclined to get proper help for them.

The workplace culture is being characterized by a common commitment to ensure a safe work environment that is free from the risks presented by untreated, undiagnosed or "covered up" substance use. They should also be committed to do all they can to maintain a recovery management system that recognizes the value of all individuals and is willing to do everything possible to see that their system works. They also need to recognize that it is likely that everyone will not respond favorably to the offered care. In such cases, they recognize and are willing to accept that these individuals can no longer be a part of their workplace as the risks, costs or potential harms are too great.

Because of this workplace culture, individuals who need help are much more likely to self-identify and friends, coworkers and supervisors are much more inclined to provide for help.

Program Leadership. The program was designed by a peer pilot with multiple years of active recovery. This contributed to their program being "safe" and somewhat distinct from other aspects of the organization. Pro-

grams in other workplaces benefit when all aspects of their program development, implementation and management are the result of “joint” stewardship and are representative of the workplace demographic. The leader or leaders of the program must hold a consistent set of boundaries around program fundamentals. This is essential in order to maintain continuity and the trust of the employee population. This particular program has done an exemplary job in this area with the result that their program is very highly valued and respected by the employee population, even though it has been involved with some rather contentious workplace issues.

Senior Leader Support. The support of the CEO/VP has been clearly communicated through the ranks of management.

Senior Champion. This program has benefitted from a senior management individual who understands addiction as a disease and what the program is trying to do because they have been touched by someone on a deeply personal level. They have also seen recovery and have an understanding of the importance and effectiveness of the 12-Step model.

Independent Physician. Individuals asking for help or being referred for a health assessment are seen by a physician, independent of the organization, who is experienced in addiction medicine, competent in occupational health, expert in aviation medicine, and can provide a complete Independent Medical Evaluation with a diagnosis and a clear assessment of an individual’s fitness for work and a recommendation for requi-

site care if needed. This physician has an appreciation for the value of 12-Step models of recovery as a readily available and proven source of on-going support.

Relapse Provision. Relapse is certainly a part of addiction and although this airline program has had very few situations involving an individual returning to drinking alcohol or using drugs, their recovery management system operates in a way that views relapse as a dynamic, evidence-based process that will respond to appropriate interventions long before actual consumption of drugs or alcohol takes place. To quote Ray Baker, “Relapse is interpreted as an indicator of insufficient coping skills and community support rather than simply patient resistance or voluntary non-compliance. Ongoing accountability and support is achieved through telephonic



Allergens breaking up a love affair?



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follow-up, online and electronic supports and recovery recheck visits with case managers and primary healthcare providers” (2017).

A Partnership and Open Lines of Communication. Program leadership maintains a strong connection with selected treatment facilities and other professionals providing services within the care continuum. They only use those that strongly encourage 12-Step utilization. Program leadership, or the peer support pilot assigned to the individual case, will visit the pilot at the facility while they are in care. Regular communication with the individual and with the individual’s case manager is an important function of the peer support.

Post Treatment Recovery Management. This is, without question, the most important component of the successful continuum of care. Several factors in this program combine to see that an individual’s recovery program stays “on-track”. Managing recovery is seen as a process that requires considerable external support initially, decreasing over time and eventually has the individual successfully managing their own recovery by voluntarily using appropriate supports.

Monitoring. A mandatory five-year comprehensive monitoring agreement is signed by those participating in this program. This agreement ensures compliance with all aspects of the individual’s on-going recovery management. (Random drug testing is a required part of the agreement). This agreement is supervised by a Monitoring Team that includes an addiction medicine physician, a representative from the Peer Support Team who is active in recovery, and a representative from the Aviation authority. Accountability to this

group is necessary to have their license reinstated.

Peer Support Team. These individuals receive extensive training in pilot assistance and their suitability for the position is assessed by PRP (Pilot Recovery Program) leadership. They are often individuals who are in long-term recovery.

Education and Connection. PRP leadership maintains connections with mental health professionals and educators in the addiction and in the aviation community, to better assist with individual concerns that present as deficits to recovery as they seek to build physical, emotional and mental health. The PRP leadership receives consistent, comprehensive training, evolving in-step with emerging research and operational experience.

Annual Review. This review of the program is presented to all interested parties: PRP leadership, association leadership, management, human resources, union, and the regulatory body.

The current opioid epidemic in Canada has overwhelmed not only the ability of our first responders, service providers, hospitals, and all other areas of health care; it has overwhelmed the political realm and the news media. Understandably, providing an appropriate response to this overwhelming situation is a public health and social policy crisis. In this current environment, I appreciate the opportunity to present the good news story of the Life In Recovery Survey and the fantastic realization that recovery from addiction is not only a reality for many people, it is predictable when we have a Recovery Oriented System of Care in place in a workplace that understands a chronic health problem can’t be treated with an acute care model;

but that success is achieved when a Comprehensive Recovery Management System is in place. I am hopeful that we will begin to see the recovery side of the addiction story on a wider scale.

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INTEGRATED DISABILITY MANAGEMENT

by Marg Green

Disability absences and illness are one of the most challenging situations facing employers today. It is estimated that at any given time, 8-12% of Canada's workforce is absent due to illness or injury (Canadian Human Rights Commission, 2007). More than ever there is a need to support an employee's continued participation in the workplace without discrimination. Not only is this imbedded in Human Rights, but this is also integral in everything from benefit plans to collective agreements and legislation. In 1962, the *Ontario Human Rights Code* was the first comprehensive code in Canada to highlight anti-discrimination policy. Section 2 of the *Ontario Human Rights Code* outlines as part of the protected grounds the right of every person to equal treatment with respect to "accommodation, without discrimination because of ...disability" (1990). Despite the many years since this came into place for those with a disability, and the number of legislative obligation changes, this concept continues to still be misunderstood. Some employers are still not returning employees to work. Aside from Human Rights, in the late 1990's the *Workplace Safety and Insurance Act* strengthened policy on the need to accommodate workplace injured workers. Most people in Ontario are aware that in 2005, *The Accessibility for Ontarians with Disabilities Act* came into play. Along with a number of service models, it laid out expectations for a comprehensive model for an integrated approach to disability management.

Another legislative change occurred in early 2018 as a result of an April 2014 Workplace Safe-

ty Insurance Appeal Tribunal (WSIAT) decision. The Tribunal found that denial of a Workplace Safety and Insurance Board claim for chronic mental stress was discriminatory. Prior to January 1, 2018 those with mental health conditions were generally considered non-occupational cases in the workplace. The recent changes to the *Workplace Safety and Insurance Act* will likely see employers faced with more overlapping occupational and non-occupational cases in complex chronic mental health situations. It may be a challenge to identify if the injury is substantially a work-place stressor and the predominant cause of the diagnosis, or not. As these changes occur, it is important to have improved communication between those managing occupational and non-occupational injuries/illness, and to have one integrated disability management approach. It is important to break down silo-based management of absences with independent departments coordinating benefits such as short-term and long-term disability (STD, LTD) and Health and Safety claims being managed separately.

The concept of one integrated approach is not new. What is critical is the need to balance the ability to maintain employee confidentiality while intervening

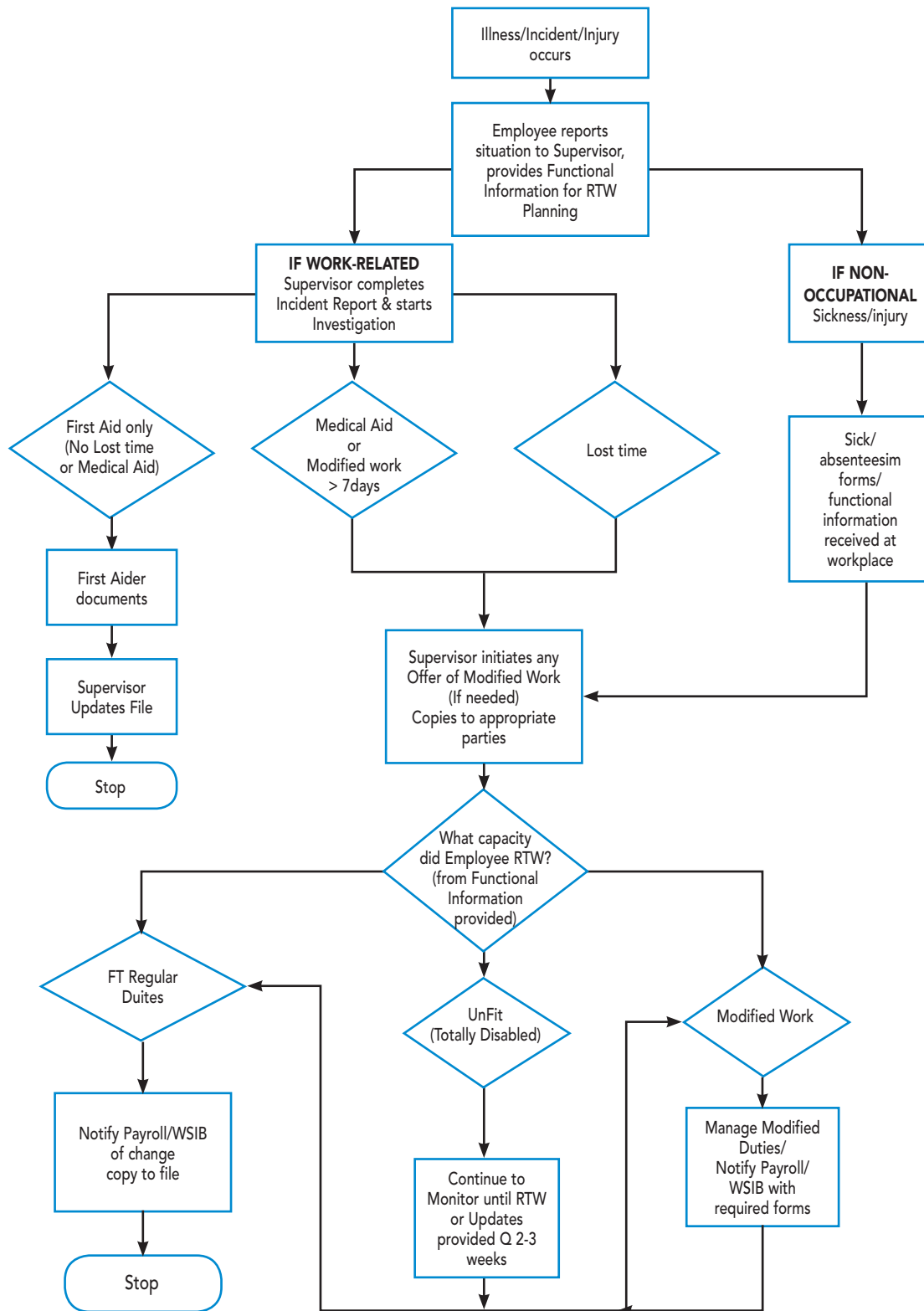
Corporate culture, values, senior management perception and participation can mean the success or failure of a disability program.

to improve health and productivity in the workplace. Many Occupational Health Nurses have been assisting workplaces with this kind of approach for years. What is new is that the legislation and best practices now support this process for both occupational and non-occupational injuries and illnesses. The forms for each program; who they are submitted to and how much is paid during an illness or injury may be different; however, the approach remains the same: to manage a safe and early return to work.

An Integrated Disability Management (IDM) system framework facilitates coordination of various overlapping programs such as Employment Insurance (EI), Short-term and Long-term disability plans (STD, LTD), and legislation (Human Rights, Workplace Safety and Insurance Act) within the disability arena. IDM also outlines a proactive approach that emphasizes primary prevention and intervention within a formal disability management system that provides a template for customized early intervention strategies.

The corporate culture, values, senior management perception, and participation can mean the success or failure of a disability program. Integrated Disability Management (IDM) is a conceptual framework that will promote efficient and effective manage-

Integrated Disability Management Process



M.Creen. January 2018

ment of both occupational and non-occupational illnesses and injury. This framework can be used to guide organizations in their strategic management processes. A systematic approach ensures the creation of a supportive work environment that employers can embrace to make sense of the tangled web of contracts, policies, procedures, past practices, and multiple service providers that workplaces involve in the disability benefit processes.

Absenteeism and disability costs need to be recognized as significant contributors to the cost of loss of productivity in the workplace. Today, the costs of illness and injury continue to rise. If you look at programs focused on disability and absence, such as worker compensation, sick leave, salary continuance, as well as short and long-term disability, the average cost is between 2.5% and 3% of

payroll. This does not even factor in other costs such as presenteeism, replacement workers, productivity, etc. (Benefits Canada, 2014). According to the Centre for Addiction and Mental Health (CAMH), the burden of mental illness in Canada is estimated at \$51 billion per year. This does include health care costs, income support, loss of productivity and impact of health to the quality of life (2018). According to the Mental Health Commission of Canada's 2010 study the lost productivity alone from absenteeism, presenteeism and turnover was expected to be over \$6 billion in 2011.

IDM strategies are designed to optimize productivity and

employee quality of life by reducing incidence, severity, human and financial costs of illnesses and injuries while at the same time adhering to legislative compliance. This type of system operationalizes the concept of senior management commitment and active involvement of all stakeholders. It enables an organizational structure for meaningful employee participation within an effective communication strategy. Management must commit to a comprehensive approach to workplace health and wellness with one integrated approach. Along with allocating appropriate resources they must identify the roles and responsibilities for managers, supervisors,

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and employees at all levels of the organization. Management must set measurable disability management objectives and create a process of accountability for all.

As soon as the workplace becomes aware of an absence or potential absence due to disability, whether it is work-related or not, there should be a process to immediately follow.

The goal would be to either keep the employee at work or provide an early and safe return to work plan. By having one integrated disability management (IDM) program you keep processes simple and consistent for everyone. The employee, having become aware at orientation that they need to notify their supervisor of any absences, would start the steps for all to follow. Once notification happens, the appropriate forms would be initiated, and appropriate follow-up occurs (i.e. incident investigation for work-related situations). Communication throughout the process is a key factor in a successful program.

Some principles of Disability Management (DM) include: open communication by maintaining contact until the employee has returned to full or alternative duties, providing a safe work environment, face-to-face meetings, written plans, sharing of functional abilities, and confidentiality of medical information. In the past, there was a medically driven model for Return to Work (RTW); however, in the late 1990's, the WSIB moved to using functional abilities. Now case law and legislation has evolved to use a more functional model with workplaces determining RTW based on functional limitations or capabilities. No longer are small notes saying "off work" acceptable. Even the medical associations support physicians providing objective functional information to the employer to assist with RTW. Nor is this

functional information considered confidential. Confidentiality of medical details; however, remains an issue. Even with moving to a more consensus-based approach with the employer and employee working together, any medical diagnosis and treatment should not be shared without consent.

The trend in disability management is shifting from simple models and types of disabilities to more complex situations and an integrated approach. Silos to manage disability have often led to inconsistencies and inefficient programs which are not cost effective. A more holistic, integrated disability management approach is needed today (Backmann, 2000). This incorporates management of all absences, whether physical or mental health issues, to look for a positive health outcome. Employers are learning that an integrated disability management (IDM) approach may be cost-effective and a responsible way to approach absenteeism in the workplace.

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NEW AND NOT SO NEW INFORMATION ON HYPOGLYCEMIA AND PREVENTION STRATEGIES

by Edwina Leung

Hypoglycemia is defined by 1) the development of autonomic symptoms (trembling, palpitations, sweating, anxiety, hunger, nausea, tingling) or neuroglycopenic symptoms (difficulty concentrating, confusion, headache, dizziness, vision change, weakness, drowsiness); 2) a low plasma glucose level of (less than 4.0mmol/L for patients treated with insulin or an insulin secretagogue); and 3) symptoms responding to the administration of carbohydrate. Common insulin secretagogues includes Sulfonylurea: gliclazide (Diamicon), gliclazide MR (Diamicon MR), and glyburide (Diabeta) + Meglitinides: repaglinide (Gluconorm)

Hypoglycemia can be severe and result in confusion, coma or seizure, requiring the assistance of other individuals. Frequency and severity of hypoglycemia negatively impacts on quality of life and promotes fear of future hypoglycemia. This fear is associated with reduced self-care and poor glucose control.

Hypoglycemic events were not uncommon in people with diabetes. It is important to prevent, recognize, and treat hypoglycemic episodes secondary to the use of insulin or insulin secretagogues. The goals of treatment for hypoglycemia are to detect and treat a low blood glucose level promptly by using an intervention that provides the fastest rise in blood glucose to a safe level, to eliminate the risk of injury and to relieve symptoms quickly. It is also important to avoid overtreatment, since this can result in rebound hyperglycemia and weight gain.

Evidence suggests that patients with Type 2 Diabetes with established cardiovascular disease (CVD), or patients >54 years of age with two CVD risk factors, or female gender may have a higher risk of hypoglycemia. Risk factors for hypoglycemia in Type 2 Diabetes may include: advancing age, severe cognitive impairment, poor health literacy, food insecurity, Increased A1C, hypoglycemia unawareness, renal impairment, neuropathy.

The HAT study – a large, patient-reported outcome study examined the impact of hypoglycemia in an insulin-using global population of more than 27,000 patients. In the 4-week prospective period, a high proportion of patients in Canada and Northern Europe reported experiencing at least one hypoglycemic event. 86.7% of patients with Type 1 diabetes and 43.6% of patients with Type 2 diabetes in Canada and Northern Europe experienced hypoglycemia. In addition, patients reported hypoglycemic events regardless of glycemic control. A1C levels were demonstrated to not be a predictor of

hypoglycemia, as patients experienced hypoglycemic events even when A1C was greater than 9.0%.

Drug-induced hypoglycemia is a major obstacle for individuals trying to achieve glycemic targets. In a separate study, hypoglycemic events drove some patients to modify certain behaviours. 85% of patients with Type 2 Diabetes did not talk to their physician about mild-to-moderate hypoglycemic episodes during follow-up visits. It is suggested that as health care professionals, we should ask patients about hypoglycemia at every visit and assess for hypoglycemia unawareness in those with a long history of diabetes and increased age.

Prompt treatment of low blood glucose (BG) level is important. Evidence suggests that 15g glucose is required to produce an increase in BG of approximately 2.1mmol/L within 20 minutes, with adequate symptom relief for most people. This has not been well studied in patients with gastropathy. A 20g oral glucose dose will produce a BG increment of approximately 3.6mmol/L at 45 minutes. Orange juice and

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milk can provide symptom relief, however the raise in plasma glucose may be slower. Glucose gel is quite slow ($<1.0\text{mmol/L}$ increase at 20 minutes) and must be swallowed to have a significant effect. Patients taking an alpha-glucosidase inhibitor (acarbose) must use glucose (dextrose) tablets or, if unavailable, milk or honey to treat hypoglycemia. Glucagon 1mg given subcutaneously or intramuscularly produces a significant increase in BG (from $3.0\text{--}12.0\text{mmol/L}$) within 60 minutes. Once the hypoglycemia has been reversed, the person should have the usual meal or snack that is due at that time of the day to prevent repeated hypoglycemia. If a meal is greater than one hour away, a snack (including 15g of carbohydrate and a protein source) should be consumed.

Hypoglycemia and Alcohol

People using Insulin and/or other medications that may cause hypoglycemia should be aware that delayed hypoglycemia can occur up to 24 hours after drinking alcohol. The effect is impaired in individuals who have consumed more than two standard alcoholic drinks in the previous few hours or in those who have advanced hepatic disease. Alcohol should be limited to 0-2 standard drinks/day for women, and 0-3 standard drinks/day for men.

Hypoglycemia and Driving

Individuals with diabetes should be encouraged to take an active role in assessing their fitness to drive. Patients should have information concerning avoidance, recognition, and appropriate therapeutic intervention for hypoglycemia. If blood glucose is $<4.0\text{mmol/L}$, treat and do not drive for at least 45 minutes and blood glucose should be above 5.0mmol/L to drive. Private and commercial driving laws for

**If blood glucose is $<4.0\text{mmol/L}$,
treat and do not drive for at least
45 minutes. Blood glucose should
be above 5.0mmol/L to drive.**

people with diabetes are different in each province. Keep in mind that hypoglycemia may be underreported due to fear of driving privileges being assessed. By law, all physicians in Ontario must report to the Ministry any patient age 16 or over who has a medical condition that may impair driving ability. The primary concern for individuals with diabetes is loss of consciousness or awareness due to hypoglycemia. In Ontario, if you hold a commercial license and your medical report indicates a diagnosis of diabetes treated with insulin the ministry will send you a Diabetes Assessment form for completion by your physician or nurse practitioner. The review process can take up to 30 business days.

Financial Impact of Hypoglycemia

Research has suggested that patients who have experienced a hypoglycemic event have more absenteeism from work. 29% went to work late, 16% left work early, and 12% missed one or more days of work due to a hypoglycemia episode.

Experiencing symptoms of hypoglycemia was associated to a work-loss of about five hours a week (from a 40-hour work week) at the cost of approximately \$3663–\$4141 per year.

The direct and indirect costs of hypoglycemia have been estimated at about \$1500 per episode of severe hypoglycemia. Hypoglycemic events may lead to increased Self-Monitoring Blood Glucose

(SMBG). In one study, patients tested an average of six times more after an event as opposed to normal.

Prevention

Using medication with low or no risk of hypoglycemia should be a priority. When insulin therapy is necessary, consider insulin with a lower risk of hypoglycemia and tailor treatment plans to each individual. Educate patients often about signs and symptoms of hypoglycemia (at every visit). Educate on the signs of nocturnal hypoglycemia and encourage three a.m. (or overnight) blood glucose checks if warranted.

Newer insulins may be helpful for patients who experienced hypoglycemia. A new class of Insulin: Ultra Long-acting Basal insulin – Insulin Degludec (trade name – Tresiba) has been studied in multiple clinical trials in adults with type 2 and type 1 diabetes. In a head-to-head trial with Lantus (long acting basal insulin) Tresiba reduces severe hypoglycemia and nocturnal hypoglycemia. Tresiba is effective for more than 42 hours. A study showed that adults with type 2 diabetes can vary their daily dosing time of Tresiba by eight to 40 hours without compromising blood sugar control. This could be beneficial for patients who do shift work.

Hypoglycemia impacts the patient and the world around them. Fear of hypoglycemia may lead to certain behaviors that can impact social and physical well-being (i.e. avoiding events, main-

taining higher than normal blood glucose levels). Family and friends of those who experience hypoglycemia may also be impacted and experience distress. Research has shown that hypoglycemia negatively impacts quality of life and psychosocial functionality.

Together, we can promote hypoglycemia awareness, give strategies to assist our patients to prevent hypoglycemia, ultimately improve their quality of life.

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She helped develop and implement the Diabetes Education Program at Campbellford Memorial Hospital in 1996, and currently works at Novo Nordisk Canada Inc. in the Diabetes and Obesity Education program.

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Appendix I: Diabetes Reference/Resources

Diabetes Canada: www.diabetes.ca

Diabetes GPS: www.diabetesgps.ca
• Diabetes resources in different languages

Canadian Obesity Network: www.obesitynetwork.ca

Dietitians of Canada: www.dietitians.ca
• Find a Registered Dietitian, fee for service – for private Consultant, most insurance plan covers Dietitian services.

EatRight Ontario: www.eatrightontario.ca
• Call a Registered Dietitian for free – general healthy eating, find fresh, nutritious and delicious recipes.

Rethink Obesity: <http://global.rethinkobesity.com/>

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HYPOGLYCEMIA AND THE WORKPLACE – AN OHN’S PERSPECTIVE

by Diana Bayne

Editor’s Note: This article complements Registered Dietitian Edwina Leung’s article on page 20. This article focuses on the ways in which employers and Occupational Health Nurses can support employees with diabetes, especially those who suffer from hypoglycemia and hypoglycemic unawareness.

Understanding Hypoglycemia and Hypoglycemic Unawareness

People with type 1 and type 2 diabetes, “especially those treated with insulins and/or insulin secretagogues are at risk for hypoglycemia” (Lee, Koh, Chui and Sum, 2011). Hypoglycemia may be defined as plasma glucose levels of less than 4.0 mmol/L and autonomic symptoms such as trembling, palpitations, irritability, perspiration, and hunger which respond to carbohydrate administration. Neuroglycopenia symptoms such as confusion, drowsiness and incoordination begin to occur at blood glucose levels of 3.0 mmol/L (Hayes, 2008). Without intervention, symptoms can progress to seizures, coma and death.

Hypoglycemia unawareness is characterized by a lack of the above-mentioned autonomic symptoms or warning signs of hypoglycemia such as hunger or perspiration. Hayes (2008) defines hypoglycemia unawareness as “the onset of neuroglycopenia before the appearance of autonomic warning symptoms. “The person may have lowered blood sugar levels but not even realize it (Lee, Koh, Chui & Sum 2011). Those who have Hypo-

glycemic Unawareness are at much greater risk for severe hypoglycemia (Martin-Timon & Del Canizo Gomez, 2015).

Challenges and Implications

Since repeated episodes of hypoglycemia can lead to hypoglycemia unawareness, the relationship between hypoglycemia and hypoglycemia unawareness is a complex dynamic, where one begets the other (Hayes, 2008).

Given that diabetic patients do not always discuss episodes of hypoglycemia with their doctors, it would be no surprise then, that employees with diabetes, especially those with hypoglycemia, would not discuss their condition with employers or colleagues. Diabetes Canada points out that diabetic workers are often fearful of unequal treatment or even loss of their job as a result of their diabetes. Again, this may be particularly true for the worker who experiences hypoglycemia.

The employee with hypoglycemia or hypoglycemia unawareness often becomes anxious and fearful of the next hypoglycemic episode. As a result, he/she may deliberately keep blood sugar levels higher than recommended. This is a barrier to achieving tighter blood sugar control.

Perhaps one of the greatest concerns for employees who experience hypoglycemia is the possible suspension of his/her driver’s license. In a 2014 report, the Ontario Ombudsman said that “typically, in cases involving diabetes-related complications, the ministry asks for information cov-

ering a period of three months to assess stability before it considers reinstating the driver’s license”.

In Ontario, doctors must report concerns about the ability to drive safely for any patient who is sixteen or older. Every occupational health physician that this author interviewed confirmed that, in their experience, family physicians do not always report to the ministry their concerns about a patient’s ability to drive safely. Some of the reasons physicians cited for not reporting patients were: damage to the physician-patient relationship; loss of the patient’s trust; and fear that patients would be less forthcoming about future hypoglycemic episodes. The Ontario Ombudsman’s report confirmed that physicians may not report concerns about a patient’s ability to drive safely due to fears of patient dissatisfaction (2014). Based on this information, it may not be prudent for the occupational health professional to rule out potential safety issues based solely on the fact that an employee holds an unrestricted driver’s license.

Severe hypoglycemia and hypoglycemia unawareness are concerning for employers and employees, especially those who work alone and/or work in safety sensitive positions. Safety sensitive work may be defined as those jobs or tasks which require ample concentration and/or have the potential to endanger the life of the employee or others. Working at heights, operating machinery or driving motorized vehicles are examples. Lee, Koh, Chui, and Sum (2011) warn that... “the risks posed with

respect to cognitive impairment can have safety implications...”

Management of hypoglycemia and hypoglycemia unawareness is complex and challenging. There is widespread agreement, however, that interventions must include individualized targets, individualized education; and blood glucose monitoring such as continuous glucose monitoring which can detect hypoglycemia (Martín-Timón and Del Cañizo-Gómez, 2015).

Employer Supports

The employer or occupational health nurse (OHN) who is unaware of the employee's diabetes is unable to support his/her efforts at self-management and prevention of hypoglycemia. Occupational health nurses and employers can work to create an open and inviting atmosphere where employees feel safe to discuss issues and needs in relation to their diabetes. Diabetes Canada (2018) reminds us that employer supports for workers with diabetes are often simple and inexpensive:

- ✓ Allowing for quick access to hypoglycemia supplies;
- ✓ Providing storage for food and supplies;
- ✓ Privacy for glucose testing;
- ✓ Breaks for testing and snacks.

Unstable or newly diagnosed employees may require some additional accommodations. Since shift work affects the body's internal clock and blood sugar control, including an increased risk of hypoglycemic incidents, an employee's schedule may need adjusting for a period of time.

Newer medications with decreased risk of low blood sugars information are listed in appendix 1 at the end of this article.

Occupational Health Nurse Role Prevention:

According to the Public Health Agency of Canada (2011) more than 50 percent of diabetes cases are people from age 25 to 64- working age adults. Employees with diabetes are absent from work two to ten days more than employees who don't have diabetes (Breton et al., 2013). The SunLife Diabetes Action Plan contains a four-step approach to prevention:

- ✓ Assess health risks within your company and use data to target greatest risk areas.
- ✓ Promote general awareness of diabetes risks through employee newsletters, posters.
- ✓ Promote personal awareness through diabetes screening clinics or questionnaires.
- ✓ Health promotion (healthy eating, physical activity, and mental health).

The SunLife Diabetes Action Plan for Employers (2014) is an excellent resource for occupational health nurses. A summary with additional detail and a link to the SunLife Diabetes Action Plan can be found in appendix II.

Support stay at work/return to work:

- ✓ Create an environment where employees feel safe to discuss their needs and issues such as hypoglycemia: Be visible and available. Visit employees at their work stations so that they become familiar with you and more comfortable to share concerns. Remind employees of where you are located and that you are available for them. Reassure employees that their medical information will remain confidential.

- ✓ Assess individual worker's knowledge, abilities, issues, needs, and glycemic control.
- ✓ Assess the workplace: What does the supervisor know about diabetes and hypoglycemia? Is he/she supportive? What are the scheduling patterns, job tasks, and potential safety issues?
- ✓ Provide individual education and support to the employee as needed or requested.

Be a resource:

- ✓ Engage the family physician: Provide the employee's job description, discuss options.
- ✓ Develop an action plan you can use with the employee and supervisor.
- ✓ Assist supervisors to identify individual accommodations and supports.
- ✓ Assist with instituting safety measures such as a buddy system.
- ✓ Educate supervisors and employees about diabetes and hypoglycemia.

Points to consider when educating supervisors about diabetes:

- ✓ Keep education sessions brief and simple. Supervisors are busy and they may be uneasy about medical issues. In my experience, more information is absorbed in shorter sessions. Provide the most important information first: Signs and symptoms of hypoglycemia, and actions to take; illustrate self-monitoring of blood glucose; brief explanation of diabetes and medications.

- ✓ Provide the supervisor with a simple concise action plan for hypoglycemia such as the one in appendix III. The action plan may also be posted in work/lunch areas.

Individualized Accommodation supports- A Case Study:

Mr. Y was a 61-year-old aviation technician with type 2 insulin-dependent diabetes for over ten years. He had worked the night shift (0600 PM to 0600 AM) for more than twenty years. His job duties consisted of inspecting, cleaning and ordering aircraft parts. Mr. Y had convenient storage space for his food and diabetic supplies and ample privacy for testing. The supervisor often remarked that Mr. Y was one of his best workers due to his positive attitude and old-fashioned work ethic.

Although several other employees worked the night shift, only one other employee worked in Mr. Y’s specific area during the night shift; the others worked in different areas of the building. Mr. Y’s son (JR) also worked at the company as an aviation technician on day shift.

During one of my regular visits to the shop at change of shift, Mr. Y’s coworker asked to speak with me in private. He had noticed that an hour or so earlier, Mr. Y was perspiring, his hands were shaky, and he seemed irritable. The colleague reported that although Mr. Y was a private person, he was usually even-tempered and cheerful. The colleague noticed the same thing about a month ago; he was so concerned that he mentioned it to Mr. Y’s son.

Mr. Y agreed to speak with me after reassuring him that our conversation and his medical information was confidential. He admitted that his blood sugar levels were low on a couple of occasions recently and his appetite had decreased

somewhat. Although Mr. Y was quite knowledgeable about his diabetes, potential complications, and self-monitoring of blood glucose, he had not seen his doctor in almost six months. Mr. Y had not told his doctor about his episodes of hypoglycemia as he was afraid that his doctor and employer would not want him at work. Mr. Y was adamant that he did not want anyone at work to know about his diabetes. Once he was reassured that our goals were the same- for him to stay at work and to be safe- Mr. Y agreed to participate in a Stay-At-Work plan. He provided consent to confer with his doctor and his son.

The issues/barriers:

- A) Due to fear of being placed off work, Mr. Y was not informing his doctor (or OHS) about recent episodes of hypoglycemia; this prevented his doctor from optimizing blood glucose control and treatment.
- B) Potential safety issue: Mr. Y worked alone except for one other colleague, and Mr. Y insisted that no colleague was to be informed of anything about his condition.
- C) Because Mr. Y had worked nights for so long and was used to these hours, he did not want to change his shift pattern.

A Stay-at-Work plan was devised with Mr. Y, his son and family doctor. The goals of the plan were: To ensure Mr. Y’s safety, to allow Mr. Y to remain at work, and to prevent further episodes of hypoglycemia (which can lead to development of hypoglycemia unawareness).

- 1) Evaluation with family doctor to review medications, rule out disease processes that may be contributing to appetite loss, revise treatment plan, and

make necessary referrals such as a dietitian.

- 2) Family doctor to provide Occupational Health dept with copy of revised treatment plan, which would allow Occupational Health to support Mr. Y’s self-management.
- 3) Mr. Y could remain on night shift as long as one other person is aware of signs and symptoms of hypoglycemia and what action to take. With his supervisor’s approval, Mr. Y’s son switched with a colleague to work the night shift with his father on a temporary basis. Mr. Y’s son was knowledgeable about diabetes and hypoglycemia, and he wanted to do this to allay his own worries about his father. Since Mr. Y’s son lived nearby, Mr. Y was able to ride with his son to work instead of driving.
- 4) Mr. Y was to check blood sugars more frequently during the night; frequency of monitoring determined and adjusted by the doctor.

Mr. Y’s doctor adjusted his insulin regimen and increased frequency of self-monitoring of blood glucose until stabilized. No cause was ever determined for Mr. Y’s temporary loss of appetite. He remained successfully at work with no further incidents of hypoglycemia. After three months, Mr. Y’s son returned his normal day shift. Mr. Y stated that he was surprised that everyone helped him stay at work rather than trying to put him off work. As a result, Mr. Y assured that he would not hesitate to notify his doctor and OHS if he experienced any issues in the future.

This plan was successful in part because Mr. Y was familiar with the OHN due to regular visits. Reas-

sureing him of confidentiality and demonstrating that our goals were the same helped to establish Mr. Y's trust and gain his cooperation in the plan.

Evidence suggests that employer support of the diabetic worker is vital to the employee's successful self-management. Supportive employers are less likely to have to deal with employees concealing their diabetes or hypoglycemia and the "unexpected consequences" (Lee, Koh, Chui and Sum, 2011). A study on the results of the Wisconsin Diabetes Prevention & Control Program found that "employees who had assistance managing their diabetes were more productive on the job and able to remain employed longer... The lost earnings from absenteeism were estimated at \$24 per employee per month for those who had assistance managing their blood sugar levels versus \$115 per employee per month for those who had uncontrolled blood sugar levels". (BHS insurance 2018).

Diana Bayne, RN is an Occupational Health Nurse with an interest in writing and a strong belief in workplace health promotion. Feel free to contact Diana at: dianaisinla@gmail.com

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Appendix I: Newer Diabetes Medications: DPP-4 Inhibitors and SGLT-2 Inhibitors

Dipeptidyl Peptidase 4 Inhibitors, or DPP4 Inhibitors, are oral antihyperglycemics which enhance insulin secretion and include Sitagliptin, Vidagliptin, Saxagliptin, Linagliptin, and Alogliptin; the medications in this drug class carry a "very low risk of hypoglycemia" (Xourgia, Papazafropoulou, Karampousli & Melidonis, 2017).

Sodium- Glucose Cotransporter 2 Inhibitors or SGLT-2 Inhibitors such as Dapagliflozin, Empagliflozin, and Canagliflozin have positive effects such as weight loss and reduced blood pressure in addition to a low risk of hypoglycemia (Xourgia, Papazafropoulou, Karampousli & Melidonis, 2017).

Newer Insulins: Fiasp and Tresiba

Fiasp® has the option of a flexible dosing (up to two minutes before a meal and up to 20 minutes after starting a meal), without compromising overall glycemic control or safety. It "is absorbed faster than NovoRapid® (conventional insulin aspart), ...which leads to improved glycemic control after a meal... without a significant difference in the overall rate of severe or confirmed hypoglycemia compared with NovoRapid®.

Novo Nordisk Canada. Tresiba® Product Monograph. August 25, 2017. Retrieved January 30, 2018 from http://www.novonordisk.ca/content/dam/Canada/AFFILIATE/www-novonordisk-ca/News/Fiasp_Launch_PR_English.pdf

Tresiba

Tresiba® is an ultra-long-acting basal insulin which provides a duration of action beyond 42 hours, and has low risk of overall, nocturnal and severe hypoglycemia. Tresiba® allows for flexibility in day-to-day dosing time with a minimum of eight hours between injections.¹

Health Canada Approves Tresiba®, a New Basal Insulin for Type 1 and 2 Diabetes. Retrieved January 30, 2018 from <https://www.newswire.ca/news-releases/health-canada-approves-tresiba-a-new-basal-insulin-for-type-1-and-2-diabetes-641991993.html>

Appendix II: Diabetes Prevention Plan

The SunLife Diabetes Action Plan for Employers (2014) is an excellent guide for devising a Diabetes Prevention Plan. The following is a brief summary of their four-step approach consisting of: 1. Organizational assessment 2. General awareness 3. Personal awareness and 4. Health promotion

1. Assess health risks within your company: The health risk assessment, a questionnaire which assesses multiple areas of health, may be available through your benefits carrier or EAP. Use the data to target the greatest areas of risk.
2. Promote general awareness of diabetes risks: Use employee newsletters, intranet; provide links to the Canadian Diabetes Association and educational material. Use initiatives such as Diabetes Awareness Month (November) and the Walk to Cure Diabetes to engage employees.
3. Promote personal awareness: Offer diabetes screening clinics (as a tool, **not** for diagnosis purposes). Employees can complete the CANRISK questionnaire on the Public Health Agency of Canada's website.
3. Health Promotion: Promote healthy eating, physical activity and emotional well-being with targeted initiatives. Take advantage of -and spread the word- about resources offered by your benefits carrier such as EAP or gym memberships.

Sun Life Financial (2014). Diabetes: An Action Plan for Employers. Cost Effective strategies to help prevent diabetes in the workplace.

<http://www.sunlife.ca/static/canada/Sponsor/About%20Group%20Benefits/Group%20benefits%20products%20and%20services/The%20Conversation/Bright%20Papers/files/10175-11-14-e.pdf>

Appendix III: At-a-Glance Hypoglycemia Action Plan

What you may see:

Cold, clammy or sweaty skin
Shakiness, tremors,
lack of coordination
Irritability or hostility

What to do

*** 1. Check blood glucose** level immediately. If glucose meter not available or

*** 2. If blood glucose is less than 4.0 mmol/L Give**

* Glucose tablets- 3 (15 g of glucose) OR
* Table sugar dissolved in water - 3 teaspoons or 3 packets (15 mL) OR
* Juice- 3/4 cup (175 mL) or regular soft drink OR
* 6 LifeSavers® (1=2.5 g of carbohydrate) OR
* 15 mL (1 tablespoon) of honey

a. **Employee may need assistance to take glucose tablets, sugar water or juice

3. Check blood glucose again in **10-15 minutes**. If it is still below 4.0

4. Treat again (Repeat step 2)

***If treatment does not work or employee becomes confused and disoriented, loses consciousness, or has a seizure, CALL 9-1-1 immediately.**

If the employee’s next meal is more than one hour away, they should eat a snack, such as a half-sandwich or cheese and crackers (something with 15 grams of carbohydrate and a protein source).

Adapted from Diabetes Canada

<https://www.diabetes.ca/diabetes-and-you/know-your-rights/employment-discrimination-your-rights/diabetes-in-the-workplace-a-guide-for-employers>



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Thursday, May 31, 2018

Registration, all sessions and events take place in The Conference Centre, 1st floor.

0700 - 0930	Registration
0815 - 0900	THOPEN – Welcome and Awards
0900 - 1000	THKey1 – From Overwhelmed to Flourishing: How to Leverage Your Different Brains to Thrive – Dr. Carlos Davidovich
1000 - 1100	Networking Break in Exhibits
1100 - 1200	THPlen1 – WSIB Chronic Mental Stress and Traumatic Mental Stress Policy Updates – Elizabeth Witmer and others
1200 - 1220	Presentation by Event Sponsor Walsh & Associates
1220 - 1400	Lunch and Exhibits (Exhibits close at 1400)
1400 - 1515	Navigating a Changing OHS Landscape: Legal & Legislative Issues – Greg McGinnis & Laura Russell
1515 - 1530	Break
1530 - 1630	THKey2 – Psychological Health & Safety: Potential Role for the OHN – Mary Ann Baynton
1630 - 1730	Annual General Meeting
1730	Day One Ends

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Friday, June 1, 2018

Registration, all sessions and events take place in The Conference Centre, 1st floor.

0800 - 0900	Registration
0830 - 01600	Workshop: <i>Managing Employees in Distress - Tools to Support Emotional and Cognitive Concerns in the Workplace</i> – Nancy Gowan
1000 - 1030	Networking Break with event sponsor Walsh & Associates
1000 - 1220	Workshop resumes
1220 - 1230	Presentation by Event Sponsor Walsh & Associates
1220 - 1330	Lunch
1300 - 1600	Workshop resumes
1600	Closing Remarks Keeping Workers Well 2018 ends

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COMMUNICABLE DISEASE PREVENTION AND MANAGEMENT

by Maureen Cividino

Background

As stated in the opening article of this series, exposures to communicable diseases in health care settings continue to place health care workers (HCWs) at potential risk to acquire and transmit infection. In an environment focused on patient safety, Occupational Health Services (OHS) perform a crucial role in protecting the health and safety of HCWs.

Part 1: (The OOHNA Journal Spring/Summer 2017) reviewed the risks to HCWs of biological exposures and occupationally acquired infections, and described how to conduct an organizational risk assessment, apply the hierarchy of hazard control measures and outlined relevant legislation.

Part 2: focuses on specific communicable diseases and protocols for pre-placement vaccination, serology, surveillance, exposure and post-exposure management, work restrictions, and required reporting. Due to the number of protocols, the OOHNA Journal will publish Part 2 in three separate articles over the next three journal publications.

There are 17 Communicable Diseases Surveillance Protocols (CDSPs) developed by the Communicable Diseases Surveillance Protocols Committee (CDSPC) for Ontario Hospitals and they are presented in alphabetical order on the website.

This OOHNA Journal (Spring/Summer 2018) covers Part 2 (a) which includes the CDSPC background and the first three protocols, Adenoconjunctivitis; Antibiotic

OHS provides a crucial service to protect the health and safety of HCWs from infectious diseases exposures.

Resistance Organisms, and Blood-borne Diseases.

Part 2 (b) will continue alphabetically with Cytomegalovirus, Enteric Diseases, Herpes, Influenza, and Meningococcal Disease. Part 2 (c) will conclude with Measles, Mumps, Parvovirus, Pertussis, Rubella, Scabies Tuberculosis, and Varicella.

Part 2 (a) Occupational Health Service (OHS) Programs

Health care organizations have a legal and ethical responsibility to protect the health and safety of their workers. This is accomplished in part through OHS programs which include HCW pre-placement screening, communicable disease surveillance, TB status, timely exposure and post-exposure management, a respiratory protection program (RPP), and a sharps program. Contact tracing and outbreak protocols are central in preventing further infection transmission and require close collaboration with Infection, Prevention and Control (IPAC) and the local public health unit.

Communicable Diseases Surveillance Protocols Committee (CDSPC)

The CDSPC was established in 1989 to address the ongoing

threat of infectious diseases in hospitals, and to meet the requirements of the Public Hospitals Act 1990, Revised Statutes of Ontario, Regulation 965.

The CDSPC consists of representatives of the Ontario Hospital Association (OHA), the Ontario Medical Association (OMA), and the Ministry of Health and Long-Term Care (MOHLTC) including physicians and registered nurses with expertise in infectious diseases, occupational health, medical microbiology, and public health. There is additional representation from Public Health Ontario (PHO), the Ontario Ministry of Labour (MOL), the Public Services Health and Safety Association (PSHSA), and the Ontario Occupational Health Nurses Association (OOHNA).

Hospital bylaws must establish and provide a health surveillance program, including a communicable disease surveillance program in respect of all persons carrying on activities in the hospital. [R.R.O. 1990, Reg. 965, s.4] and the hospitals must adopt the Communicable Diseases Surveillance Protocols (CDSPs) published jointly by the Ontario Hospital Association (OHA) and the Ontario Medical Association (OMA) and approved by the Minister (of Health and Long Term Care).

Communicable Diseases Surveillance Protocols (CDSPs) in Ontario Hospitals

There are currently 17 CDSPs. Each protocol includes a section on rationale, pre-placement, continuing surveillance, exposure, acute disease, post-exposure management, restrictions for work and reporting requirements. They are based on current evidence and updated at least every two years.

The articles will summarize key points from each protocol for quick reference. Where there are no specific statements in a section (e.g. pre-placement, surveillance) these have been left out.

Note: this summary is not intended to replace the actual protocol which should always be consulted for any clinical issues.

Adenovirus Conjunctivitis

Background: Adenovirus is a primary cause of outbreaks of conjunctivitis in eye clinics (Heymann, 2015). It has also been implicated in outbreaks in neonatal intensive care units (Calkavur, Olukman, Ozturk, Kilik, Gulfidan, Devrim, 2012), pediatric units (Hoyle, Erez, Kirk-Granger, 2016), (James, Vernon, Jones 2005), and long-term care homes (Dominiguez-Berjon, Henando-Briongos, Miguel-Arroyo, 2007).

Clinical Presentation: Adenovirus conjunctivitis is distinct from bacterial or other viral conjunctivitis which commonly presents with mucopurulent discharge, is not usually painful and resolves in a few days. **Adenovirus conjunctivitis is typically painful, with watery discharge, photophobia, blurred vision, low-grade fever, malaise and pre-auricular lymphadenopathy,** a distinguishing feature. Persistent corneal infiltrates and permanent scarring have been reported.

Incubation Period, Communicability and Route of Transmission:

The incubation period is five to 12 days with viral shedding from late incubation to 14 days after symptom onset (Heymann, 2015). Transmission is by direct or indirect contact of ocular mucous membranes with infectious eye secretions, via contaminated hands or contaminated surfaces, equipment/devices, or solutions. Outbreaks have been linked to contaminated multi-dose vials of drops and improper disinfection of tonometer tips.

Acute Disease: There is no specific treatment. Meticulous hand hygiene, separate towels and cleaning of contaminated surfaces is essential.

Work Restrictions: HCWs with adenovirus conjunctivitis should not provide patient care for 14 days after onset of infection for each infected eye. For bacterial conjunctivitis patient care is restricted until symptoms resolve, usually one to two days.

Antibiotic Resistance Organisms (AROs)

Background: Bacterial resistance to antibiotics has been described since their introduction in the 1940s. Continuous heavy antibiotic use in medicine and agriculture has resulted in increased acquired antibiotic resistance.

Examples of organisms of importance are methicillin resistant *Staphylococcus aureus* (MRSA), vancomycin resistant enterococci (VRE), *Clostridium difficile* and Enterobacteriaceae producing resistance enzymes, such as extended spectrum beta-lactamases (ESBLs) and carbapenemase-producing Enterobacteriaceae (CPE). Strains of MRSA that are community associated (CA-MRSA) contain virulence

Adenoconjunctivitis Protocol Key Points:

- Highly contagious and responsible for multiple outbreaks, especially in eye clinic settings
- Clinical presentation differs from 'pink-eye'; adenoconjunctivitis is painful with watery discharge, malaise, pre-auricular node and can result in corneal scarring
- Long incubation period and period of communicability can result in up to 28 days restricted work

factors that can cause serious illness in healthy people (Fridkin, Hagerman, Morrison et al., 2005), (Miller, Perdreau-Remington, Rieg et al., 2005) (Barton, Hawkes, Moore et al., 2006). Both CA-MRSA and MRSA infections have been reported as healthcare associated infections in hospital settings. Emergence of CPE is of great concern because of limitation of effective antibiotic treatments and up to 50% mortality rate (Tzouveleakis, Markogiannakis, Piperaki, Souli Daiko, 2014), (PHO 2017), (Falagas, Tansarli, Karageorgopoulos, Vardakis, 2014).

Policarpio and Patel reported in 2015 that Ontario health care facilities have seen a dramatic rise in the numbers of AROs. Hospitalized patients on multiple antibiotics and undergoing procedures are more predisposed to colonization and infection. Infection transmission can occur through direct or indirect contact via contaminated surfaces, through poor hand hygiene or poor environmental cleaning practices. HCWs may become colonized or infected with AROs and be a potential source for transmission, however, they are not usually implicated as the "source" of an outbreak.

Healthcare associated AROs are generally not more virulent or more transmissible than antibiotic susceptible strains and generally not a threat to healthy people (PIDAC PHO Annex A, 2013)

HCWs, including immunocompromised HCWs, can avoid acquiring MRSA and other AROs by consistently following Routine Practices, including hand hygiene.

Pre-Placement/Surveillance: No routine screening or surveillance of HCWs for AROs is recommended. Skin assessment is recommended because risk for acquisition and transmission of organisms is increased through non-intact skin.

Exposure: For patient care, following routine practices (including hand hygiene), and all IPAC recommended additional precautions help prevent transmission

to HCWs. When these practices are not followed HCWs can be exposed through direct or indirect contact through contaminated hands or surfaces.

HCWs who are epidemiologically linked to transmission of an ARO are expected to comply with recommended screening, treatment, and work restrictions. Consultation with IPAC will help determine required sampling sites.

MRSA: may include swabs of both nares (one swab); open lesions or areas of dermatitis; and swabs of rectum, perineum, and groin. HCWs may prefer to collect their own rectal/perineal/groin swabs.

VRE, ESBL and CPE: HCWs who are carriers of VRE, ESBL or CPE have rarely been associated with transmission; thus, screening of HCWs who have direct patient contact is not generally required or recommended. If IPAC inves-

tigations indicate an association with ongoing nosocomial transmission, implicated HCWs may be screened and swabs should be taken from the rectum and any open lesions or dermatitis. There is no established decolonization regimen. IPAC practices will need close review.

MRSA Decolonization Protocol: HCW decolonization is generally indicated if the strain isolated from the HCW is the same genotype as the strain isolated from the patient, and the HCW is epidemiologically linked to ongoing transmission (Muto, Jernigan, Ostrowsky, et al., 2003), (Seigel, Rhinehart and Jackson et al., 2007).

MRSA Sample Decolonization Regimen (Simon, Phillips, McGeer et al., 2007) includes:

- 4% chlorhexidine bath daily (avoid contact with eyes and ears); **plus**



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- 2% mupirocin cream or ointment to anterior nares 3 times/day; **plus**
- trimethoprim/sulfamethoxazole DS one tab orally twice daily, or doxycycline 100 mg orally twice daily; **plus**
- Rifampin 300 mg orally twice daily
- All for a total of 7 days **then**
- Swab anterior nares and any other previously positive sites
- Repeat swabs weekly until 3 negative consecutive sets of swabs
- If swabs remain positive consult with an infectious diseases specialist

Work Restrictions: Restrictions from patient care activities should be decided on a case-by-case basis according to hospital IPAC policy, dependent on any or all of the following:

- evidence of ongoing transmission of the organism
- evidence that the HCW is linked to ongoing transmission
- strain isolated from the HCW is the same genotype as the outbreak strain
- potential consequences of the ARO in high risk populations
- effectiveness of decolonization therapy
- compliance with treatment and IPAC precautions and
- severity of infection

Blood-Borne Infectious Diseases (hepatitis B, hepatitis C, HIV)

Background: HCWs who have potential contact with blood and/or body fluids of patients have an occupational risk of acquiring infection with the hepatitis B virus (HBV), hepatitis C virus (HCV) and/or human immunodeficiency virus (HIV). Prevention programs, including immunization against HBV, the use of safety-engineered needles, analysis of incident reports, HCW education, and process improve-

Antibiotic Resistance Organisms Protocol Key Points:

- Healthcare associated AROs are generally not more virulent or more transmissible than antibiotic susceptible strains and generally not a threat to healthy people
- HCWs, including immunocompromised HCWs, can avoid acquiring MRSA and other AROs by consistently following Routine Practices, including hand hygiene
- MRSA is the only organism where HCW decolonization may be indicated and only when the HCW is epidemiologically linked to ongoing transmission and the strain isolated from the HCW is the same genotype as the strain isolated from the patient

ment are critical to reducing exposures.

HBV is transmitted more easily than HIV in the health care setting. After a needle-stick injury from a needle contaminated with HBV, there is a 6-30% chance that an exposed susceptible person will be infected. There is a 0.3% risk of infection with HIV and approximately 1.8% risk for HCV for similar exposures.

Effective therapies, including antiviral therapies, are available for HBV, HCV, and HIV to reduce viral load to low or undetectable levels, improving patient safety and the health of the worker.

Pre-Placement: HCWs who are infected with HBV, HCV or HIV can generally work safely with patients without risk of virus transmission as long as reasonable precautions are taken. HCWs performing exposure-prone procedures have an ethical obligation to know their

serologic status for HBV, HCV, and HIV. Many professional colleges, e.g. the College of Physicians and Surgeons of Ontario, have specific policies with regard to pre-appointment screening for members who perform exposure-prone procedures. Disclosure of an infected HCW's status to patients is not required (SHEA, 2010).

Routine screening or surveillance of HCWs for hepatitis B surface antigen (HBsAg), antibody to HCV or antibody to HIV is not required or recommended.

All susceptible potentially exposed HCWs should be vaccinated against HBV. Routine booster doses are not recommended (NACI). **Immune memory persists even in the absence of detectable antibody in immunocompetent persons with previously demonstrated antibody to HBsAg.**

- Vaccination against HBV is a three-dose schedule; first dose given at baseline; second dose one month later and third dose at six months from baseline
- HCW should then be tested four to eight weeks later for antibody to HBsAg
- **Evidence of immunity is antibody titre to HBsAg ≥ 10 IU/L**
- If the result is <10 IU/L repeat the three-dose vaccine series (NACI)
- Retest antibody level one month after completion of second series
- If antibodies to HBsAg remain <10 IU/L, HCW is considered a vaccine non-responder
- There is no value in giving more than six doses of vaccine

A HCW whose immunization was remote (e.g. public school two dose schedule) and without documentation of immunity, test for antibody to HBsAg:

- If antibodies to HBsAg are < 10 IU/L give one dose of vaccine and test one month later
- If antibodies to HBsAg remain < 10 IU/L, repeat three-dose vaccine series

Exposure: Exposure requires both an injury (i.e. percutaneous injury from a needle or other sharp object, a splash of blood or other body fluid onto a mucous membrane or non-intact skin, or a human bite that breaks the skin) and contact with blood or body fluid capable of transmitting HBV, HCV or HIV.

There must be a process to effectively provide timely follow-up to exposed HCWs when the OHS is closed or does not formally exist.

First Aid: When a HCW is exposed to blood or body fluids the HCW should:

- allow wound to bleed freely and should not pinch, squeeze or 'bleed' the wound
- then wash gently but thoroughly with soap and water
- report to supervisor/manager or delegate and complete an incident report as per hospital protocol; and
- proceed immediately to the OHS (or designated alternate)

OHS (or designate) will perform the following procedures for exposed HCW:

- Cleanse thoroughly and apply antiseptic
- Td booster if more than 10 years since last booster dose.
 - ♦ if the wound was caused by a dirty object or is a deep puncture wound difficult to clean (i.e., **tetanus-prone wound**) **provide Td booster if more than five years since last booster dose.** **N.B. If HCW has not yet received an adult dose of**

Tdap (tetanus, diphtheria and acellular pertussis), give Tdap in place of Td booster regardless of interval for last dose of Td.

Assess hepatitis B immunity:

- If HCW has documented immunity no further follow-up
- If HCW has begun hepatitis B vaccine series, continue and complete as originally scheduled
- If HCW has received no doses of hepatitis B vaccine, give first dose and arrange for second and third doses according to the recommended schedule

For Exposure to Unknown Source:

- If the patient source of the blood is not known, the OHS (or designate) must:
- offer baseline testing for HBV (if adequate antibodies to hepatitis B are not on file), plus antibodies for HCV and HIV
- **arrange follow-up testing at 6 weeks and 4 months for HIV, and at 3 months and 6 months for HBV and HCV**

For Exposure to Known Source:

Ascertain first if the HCW is willing to be tested. Serologic testing of the source patient is the most reliable method to assess risk of exposure. Informed consent must first be obtained from the source patient. Note there is no value in testing the source patient unless the HCW is willing to be tested.

If the exposed HCW is willing to be tested:

- draw blood for baseline antibodies to HBV (unless adequate antibody levels are documented), HCV, HIV, and alanine transferase (ALT), a liver enzyme;
- have most responsible physi-

cian or designate inform source patient of the incident, request consent and obtain history of risk factors for infection from source;

- with consent, draw blood as soon as possible from the source patient and test for HBsAg and antibody to HCV and HIV;
- if source patient's test results are negative, no further follow up is usually required unless patient is at high clinical or epidemiological risk for HBV, HCV or HIV infection and HCW should be counselled.

Hepatitis B Infected Source:

When source patient is positive for HBsAg, management of HCW is dependent on the HCW's immune/immunization status (NACI):

- if HCW has documented immunity to HBV at any time, no further action (Schillie, 2013);
- if HCW is non-responder to two series of hepatitis B vaccine, administer hepatitis B immune globulin (HBIG) and give second HBIG one month later (Schillie, 2013);
- if HCW is non-responder to one course of hepatitis B vaccine, administer HBIG and begin second series of vaccine (3 doses) (Schillie, 2013);
- if HCW has received 3 doses of vaccine and immune response unknown, test for antibody to HBsAg (Schillie, 2013); if antibody immune no further action;
 - ♦ if HCW not immune, give HBIG plus 1 dose of vaccine; test for antibody at 6 months (will allow antibodies from HBIG to wane) (NACI)
 - ♦ if antibody result unknown at 48 hours, give 1 dose of vaccine; when result is known, if <10 IU/L, give HBIG and test for antibody at 6 months. If immune, no further action;
- if HCW has received 2 doses of vaccine, test for antibody and

give one dose of vaccine. If antibody result unknown at 48 hours, give HBIG. When result known, if antibody <10 IU/L or unknown at 48 hours, give one dose HBIG. If immune, no further action;

- if HCW has received one or no doses of vaccine, test for antibody, give one dose HBIG and begin or complete vaccine series as scheduled.

Note: When indicated, give HBIG as soon after the incident as possible as efficacy decreases substantially when given >48 hours after exposure and is of very limited value after 7 days.

Hepatitis C Infected Source:

Counsel the exposed HCW about the risk of becoming infected, (approximately 1.8%) and counsel to report signs or symptoms of infection (fatigue, anorexia, abdominal pain, jaundice). Although there is no vaccine or prophylaxis available, there is now very effective antiviral treatment, often curative.

- **HCW exposed to HCV should be tested as soon as possible after exposure for antibody to HCV and for baseline ALT**
- **Repeat antibodies and ALT level at 3 and 6 months**
- If HCW has antibodies to HCV at baseline or seroconverts during the follow-up period, refer for medical assessment

HIV Infected Source: Counsel the exposed HCW about the risk of becoming infected (estimated as 0.3% for percutaneous exposure and 0.09% for mucous membrane exposure) and the implications for behaviour in the follow-up period. Factors associated with HIV transmission include a deep injury, device visibly contaminated with blood, procedures involving a needle in a vein or artery, and

terminal HIV illness in the source patient (CDC, 1995).

- HCW exposed to HIV should be tested as soon as possible, within one week of the incident, for antibody to HIV. Repeat antibody testing at 6 weeks and 4 months.

Post-exposure prophylaxis (PEP) for HIV: WHO updated its HIV PEP guidelines for occupational exposures in 2016. The new recommendations provide simpler regimens and prescribing, resulting in improved adherence and completion rates. There are also fewer side-effects with this regimen.

- HIV PEP must be started as soon as possible, preferably within one hour, although can be given up to 72 hours post-exposure. The interval after which there is no benefit from PEP is undefined. When uncertain, consult with infectious disease specialist for guidance;
- Hospitals should establish a system and protocol providing availability of counselling and post-exposure therapy at all times. This usually means a three-day HIV PEP kit in OHS and ER, and policies in ER to triage exposed HCW for immediate assessment when OHS is closed;
- PEP regimen should include at least 3 antiretroviral drugs;
- Common HIV PEP Protocol: Raltegravir 400 mg PO twice daily plus Truvada® (tenofovir DR 300mg and emtricitabine 200 mg) once daily for 28 days;
- Note that drug regimens change over time. Consultation with an infectious disease specialist should occur ideally within 24 hours (WHO, 2016)
 - ♦ Consult with infectious disease specialist with HIV expertise when dealing with an exposed pregnant or breastfeeding HCW;

- If HCW has antibodies to HIV at baseline or seroconverts during the follow-up period, refer for medical assessment.

Note: HCW who becomes infected with HCV after an exposure to a source patient co-infected with HIV and HCV should be followed for HIV seroconversion for an extended period of time, i.e., for 12 months (Kuhar, Henderson & Struble, 2013).

Options under the Mandatory Blood Testing Act, 2006

In instances where an individual has come into contact with a bodily substance of another person while providing emergency health care services or emergency first aid to that person, or while in the course of his or her duties, if the person belongs to a prescribed class, the individual may have remedies under the Mandatory Blood Testing Act 2006. Application is made through the local Medical Officer of Health.

Exposure of a Patient to HCW's Blood

If a patient is exposed to HCW's blood, the patient must be notified, counseled and offered the appropriate post-exposure regimen and follow-up, if indicated. The HCW has an ethical obligation to be tested for HBV, HCV, and HIV at the time of the exposure. The confidentiality of the HCW must be maintained.

Reporting Exposures

If a contract worker or student suffers possible exposure to a blood-borne disease in the hospital, the OHS must notify the supplying agency/school that the person has been exposed and that the agency/school must follow up the case. If there is no supplying agency, the local Medical Officer of Health can provide advice. Incident

reporting as per hospital protocol should be completed.

Reporting Illness After Exposure

The OHS must educate the exposed HCW to be alert to signs and symptoms of infection and HCW is to report these to OHS and follow with their personal physician for medical investigation and treatment.

Suspect or confirmed HBV and HCV (as per Ontario Regs 559/91 and amendments under the Health Protection and Promotion Act) must be reported to the local Medical Officer of Health.

In accordance with the Occupational Health and Safety Act and its regulations, an employer must provide written notice within 4 days of being advised that a worker has an occupational illness, including an occupationally-acquired infection, and/or a Workplace Safety and Insurance Board (WSIB) claim has been filed by or on behalf of the worker with respect to an occupational illness, including an occupational infection, to the Ministry of Labour, Joint Health and Safety Committee and trade union, if any. **The employer must report an occupational BBP exposure to the WSIB and to the Ministry of Labour if PEP is given.**

Summary

OHS provides a crucial service to protect the health and safety of HCWs from infectious diseases exposures through vaccination and by implementing policies and procedures based on Communicable Diseases Surveillance Protocols legislated under the Public Hospitals Act for Ontario hospitals. These protocols provide guidance on exposure definition, post-exposure management, work restrictions, and reporting obligations.

Blood-borne Infectious Diseases Protocol Key Points:

- Routine screening or surveillance of HCWs for hepatitis B surface antigen (HBsAg), antibody to HCV or antibody to HIV is not required or recommended
- Hepatitis B is vaccine-preventable; test HCW immunity post-vaccination
- Hepatitis B immunity = antibodies to HBsAg ≥ 10 IU/L –once documented, life-long immunity in the immunocompetent even if a subsequent test of antibodies demonstrates <10 IU/L
- After a needle-stick injury from a needle contaminated with HBV, there is a 6-30% chance that an exposed susceptible person will be infected. There is a 0.3% risk of infection with HIV and approximately 1.8% risk for HCV for similar exposures
- Process must be in place for urgent follow-up of exposures
- There is excellent treatment for hepatitis C (often curative)
- HIV PEP must be given asap and arrange infectious disease specialist follow-up
- Notify Medical Officer of Health for suspect or confirmed HBV and HCV and notify WSIB and MOL if PEP is given

The remaining protocols will be presented in future publications of The OOHNA Journal.

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MILD HAND DERMATITIS: IDENTIFICATION AND MANAGEMENT PRACTICES

by Rosemary Ku, Kathryn Nichol and D Linn Holness

Occupational contact dermatitis is a common occupational skin disease caused by irritant or allergen exposure (Diepgen, 2006). Healthcare workers (HCWs) are at increased risk for occupational contact dermatitis given their high exposure to wet work and allergens such as rubber components and preservatives (Higgins et al., 2016). The estimated one-year prevalence of hand dermatitis (HD) among HCWs is approximately 21-30% versus 2-15% in the general population (Campion, 2015; Hamnerius et al., 2017).

Early identification of HD in its mildest form is important because outcomes are better the earlier the disease is diagnosed and treated (Adisesh et al., 2002; Holness, 2004; Malkonen et al., 2010). If HD progresses to a moderate or severe state, it is associated with negative consequences including decreased worker productivity and quality of life, alongside increased healthcare costs (Diepgen, 2013). Cases that are not treated early enough are often more difficult to treat and may become irreversible (Adisesh et al., 2002).

A scoping review revealed a lack of guidelines and best practices focused on the identification and management of mild HD, with the majority of resources focused on moderate or severe. Furthermore, very little is known about how Occupational Health nurses (OHNs) identify and manage mild HD in HCWs, which is important given the primary role OHNs have in the prevention and management of the condition.

The objectives of the study were:

- 1) Describe how OHNs identify and manage mild hand dermatitis
- 2) Describe the facilitators and barriers associated with the identification and management of mild hand dermatitis

Methods

This qualitative study consisted of semi-structured interviews with hospital OHNs and was approved by the ethics boards at St. Michael's Hospital and the University of Toronto.

Sampling and Recruitment

A purposive sampling method was used to identify OHNs from hospitals across the Greater Toronto Area (GTA). OHNs who worked in a corporate health and safety department were recruited via email through the Toronto Occupational Health Leaders Group and the Ontario Occupational Health Nurses Association. All individuals were asked to forward the email to other OHNs within their hospital. In total, nurses from 26 different hospitals were contacted.

Data Collection

Qualitative semi-structured interviews were conducted at the participant's hospital. The interview guide was formulated based on pre-existing literature. When possible, HD-related resources were collected from participants. All interviews were audio recorded and transcribed verbatim.

Data Analysis

Transcripts were analyzed using

a directed content analysis approach (Hsieh & Shannon, 2005). This approach involved several steps including: becoming familiar with the data by reading and re-reading the transcripts, generating codes, counting the codes, and categorizing the codes into broad themes (Hsieh & Shannon, 2005). Initially the three investigators independently analyzed transcripts and subsequently reconvened as a group to discuss and reach consensus on key codes and themes.

Results

Fifteen OHNs were interviewed, representing 11 of the 26 hospitals contacted. Results describing practices associated with the identification and management of HD are presented below, followed by perceptions of related barriers and facilitators.

Work Practices

Identification Practices

Participants reported that the identification of mild HD typically occurs at the time of hire or when HCWs report to Occupational Health. OHNs identified that common clinical signs were redness and dryness, alongside a sense of itchiness. The presence of cracked skin was often reported as a marker to distinguish mild from moderate or severe HD.

Following the indication of a skin condition, OHNs often obtained information regarding the worker's health history, exposures, hand hygiene practices, and aggravating and alleviating factors to identify potential irritants or

allergens of concern. Subsequently, OHNs reported completing a visual hand assessment, assessing both the extent and severity of disease, alongside the function of the hands. An important part of the assessment was the identification of cracked skin.

To assist in the assessment, some OHNs reported using a specific tool, while others relied on their clinical judgement. If a tool was available, some participants did not use it because it was too long or time consuming.

Management Practices

Once HD is identified, many OHNs reported that they would manage these cases themselves. Some OHNs would refer workers to the occupational medicine physician or the HCW's family physician.

To treat mild HD, the most commonly recommended first line of treatment was use of moisturizers. OHNs reported reviewing proper hand hygiene practices including the use of soaps, alcohol-based hand rubs, and gloves. OHNs also reported that they would typically remove HCWs from clinical duties if cracked skin was observed.

Within this study, many OHNs reported that HD-related resources were sparse and if resources were available, they were typically hand hygiene oriented. HCWs were instructed to return to Occupational Health for a follow-up appointment within 2-12 weeks; however, workers were often lost to follow-up, leading OHNs to assume that HCWs were compliant with treatment.

Barriers

Healthcare workers do not report to Occupational Health

All OHNs agreed that the primary barrier associated with HD was that HCWs do not report to Occupational Health. OHNs reported seeing 2-20 cases of mild HD annu-

ally. The most common reason why HCWs do not report to Occupational Health is because OHNs try to manage their condition themselves, up until their condition becomes unmanageable. Other reasons included the risk of modified duties that weren't meaningful (non-patient care), lack of time, belief that HD is an inherent part of the job, not knowing whether the condition is work-related, and the presence of an underlying skin condition (e.g., eczema).

Modified health review process for new hires

The second barrier identified was the modified new hire health review process. Nurses from five different hospitals reported that they no longer see new hires in-person. Instead, new hires are asked to complete a health history form and visit a physician to obtain all required immunizations. Once completed, the paperwork is submitted to Occupational Health for review. Only workers with concerning information would be contacted for further investigations. OHNs speculated that this change could be due to management changes and/or decrease in funding, human resources, and time. Six unique health review forms were collected, and each form gathered information on skin integrity differently, with most forms collecting minimal information (e.g., allergy to latex). Only one hospital reported that a formal hand assessment was completed with all new hires.

Lack of collaboration between Occupational Health and Infection Prevention and Control (IPAC)

The third barrier identified was the lack of collaboration between Occupational Health and IPAC. This lack of collaboration was explicitly stated by some OHNs. Several nurses reported that hand hygiene training, alongside

products for hand hygiene and care are primarily coordinated by IPAC with little involvement from Occupational Health; however, the concern for infection control was reported to impact Occupational Health practices. For example, if OHNs observed cracked skin, this would suggest the potential for infection and lead OHNs to classify the condition as moderate or severe. Although OHNs recognized the importance of complying with IPAC hand hygiene guidelines, some nurses reported that HCWs were over-sanitizing their hands leading to compromised skin integrity.

Facilitators

Education and Awareness

To promote early identification of HD, the most common recommendation made by participants was to offer more education to HCWs. OHNs reported that this education should highlight the clinical signs and symptoms of HD, highlight wet work as a common occupational risk factor, and encourage HCWs to utilize Occupational Health services. To deliver this education, various strategies were suggested including the use of print materials and online or in-person training. OHNs also emphasized the need to educate supervisors who can subsequently instruct and support HCWs.

Common Assessment Tools and Resources

The second facilitator identified in this study was the availability of a common assessment tool that OHNs can use across hospitals. This tool should outline best practices across severity categories and include pictures and flowcharts. In addition to this tool, participants felt a resource that could be provided to HCWs with mild HD would be valuable.

Discussion

Work Practices

Findings from this study show that identification of HD typically occurs at the time of new hire or when HCWs self-report to Occupational Health. As indicated by Nichol et al. (2015), it is important that Occupational Health departments continuously screen for HD since HCWs are continuously exposed to wet work.

With respect to management, many OHNs noted that they would advise HCWs to return for a follow-up appointment; however, HCWs were often lost to follow-up. A previous study identified that a significant impact on work is observed in workers following six months of diagnosis (Holness, 2011). Considering this, HCWs should be encouraged to return to Occupational Health to ensure optimal skin integrity is maintained.

Barriers

The barriers identified in this study were similar to those identified by Nichol et al. (2015). These authors reported reasons for non-reporting included fear of modified duties, lack of time, and not knowing whether their condition was work-related (Nichol et al., 2015).

An unexpected finding in this study was the change in the new hire health review process. Some OHNs reported that they no longer see new hires in-person; instead new hires just submit the necessary paperwork to Occupational Health for review. This change may minimize the amount of baseline data collected which could be used to inform future management strategies, should a problem arise (Nicholson et al., 2010). Moving forward, OHNs should re-strategize this process to ensure important baseline data is collected and to adequately

screen workers for HD upon hire.

The last barrier identified was the lack of collaboration between Occupational Health and IPAC. Skin health and prevention of work-related HD is the focus of OHNs and hand hygiene and the prevention of infection transmission through cracked skin is the focus of IPAC. In this study, the example OHNs provided that highlighted this difference was that some workers were over-sanitizing their hands to the point of skin breakdown. Within Ontario, Best Practices on Hand Hygiene in All Health Care Settings, has been published by Public Health Ontario (2014). These guidelines provide evidence-based advice on hand hygiene and moisturizing skin care products for HCWs and can be used by both Occupational Health and IPAC to ensure HCWs are provided with consistent information which will support the prevention and management of HD.

Facilitators

When asked about facilitators, many nurses reported that more promotion and education is required. This education will encourage HCWs to seek early medical attention which is important since moderate or severe HD has a greater impact on work and quality of life (Kudla & Holness, 2015).

More specifically, OHNs emphasized the need to educate supervisors. The effect that supervisors have on worker behaviour is well supported in the literature. For example, one study identified that workers placed trust in the information provided by supervisors, which subsequently promoted a behavioural change (Zack et al., 2016).

OHNs also noted that a common assessment tool used across hospitals would be helpful. This tool should outline the clinical signs and symptoms of HD, as well as management best prac-

tices across all severity levels. Furthermore, flow charts and pictures would be valuable. These findings are consistent with the study conducted by Coenraads et al. (2004), who reported that photographic guides were helpful for the assessment of HD.

Strengths and Limitations

Readers should exercise caution in generalizing the results of this study to other hospitals, specifically those outside the Greater Toronto Area (GTA). Results may have been impacted by a social desirability bias, meaning participants may have responded to questions in a more socially acceptable way to avoid negative evaluations. Despite these limitations, this study included OHNs from eleven GTA hospitals. Since all three investigators analyzed the transcripts independently using a directed content analysis approach, the use of triangulation supports the validity of the results.

Conclusion

The results of this study indicate that there are gaps in practice related to the identification and management of mild HD within GTA hospitals. To close these gaps, it is recommended that Occupational Health departments work towards promoting HD awareness and education to HCWs, with a specific emphasis on educating supervisors. Second, OHNs should re-strategize the new hire health review process to ensure important baseline data is collected pertaining to workers' skin integrity. Third, collaborative efforts should be strengthened between Occupational Health departments and IPAC to ensure optimization of prevention and management strategies. Lastly, common tools and resources should be developed to promote consistent work practices. These recommendations should

assist with the early identification and optimal management of HD in HCWs.

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IMPROVING WORKPLACES TO ENABLE PEOPLE LIVING WITH MENTAL ILLNESS TO STAY IN THEIR JOBS

by Margaret Oldfield, Rebecca Gewurtz, Emile Tompa, Karen Harlos, Bonnie Kirsh, Rosemary Lysaght, Arlene MacDougall, Sandra Moll, Sergio Rueda, and Hélène Sultan-Taïeb

Retaining employees who live with mental illness is a win-win situation, according to a new study funded by the Mental Health Commission of Canada (MHCC). The research team, led by Dr. Rebecca Gewurtz at McMaster University in Hamilton, wanted to explore the organizational strategies and practices that promote retention of people with mental illness in Canadian workplaces. They explored barriers and benefits to retaining people with mental illness from the perspective of key workplace stakeholders, including workers, coworkers, employers, and individuals who have championed supporting people living with mental illness. The study focused particularly on what the MHCC refers to as the “Aspiring Workforce”: people who have been unable to enter the workforce due to a mental illness, are in and out of the workforce due to episodic or persistent illness, or who wish to re-enter employment after a lengthy period away from work.

To achieve their objectives, the researchers worked with five organizations that have made concerted efforts to accommodate workers with mental illness. These organizations varied in size, industry sector, and location across Canada. Table 1 describes the participating organizations. Thirty participants across the organizations were interviewed. They ranged from front-line staff to managers and supervisors in positions of varying responsibility and authority.

“The conversation about employment for people living with a mental illness must shift from barriers to opportunities. Employers have an opportunity to tap into a population that is qualified, skilled, and loyal. Benefits for accommodating people living with a mental illness far outweigh the costs employers may incur and maintaining meaningful employment is a key factor in ensuring their recovery. This innovative research will move the needle forward on this important discussion in Canada.”

— Louise Bradley, BN, MS, CHE, President and CEO,
Mental Health Commission of Canada

Employees with mental illness, along with coworkers and managers of people with mental illness, were asked about their experiences working in the organization. Managers were also asked about policies in their organizations that help or hinder retaining employees with mental illness. Findings across the case studies were compared to identify strategies, promising practices and challenges to enable people in the Aspiring

Workforce to stay in the job. To provide context for the case studies, the researchers reviewed documents about each organization and conducted on-site workplace observations.

The strategies and promising practices identified are detailed in the study report. The research team also plans to publish scientific papers from the study in academic journals. In this article, we describe how occupational health

nurses can facilitate improvements in workplaces so that workers living with mental illness can remain employed. These recommendations should be adapted for each specific organizational context, after considering the working environment and the needs of the organization's workers.

1. Occupational health nurses can encourage employers to build inclusive workplace cultures that value diversity, embrace open communication, and engage workers by drawing on existing resources, such as the *National Standard of Canada for Psychological Health and Safety in the Workplace*. The Standard contains information on how to identify psychological hazards in the workplace, assess risks associated with hazards that cannot be eliminated, implement practices that support and promote psychological health and safety at work, and create a culture that promotes

psychological health and safety.

2. Occupational health nurses can facilitate the development of workplace standards and guidelines for communications that foster civility. This is a key aspect of mentally healthy workplaces. Such guidelines should direct all staff, including executives and managers, to model civility in their interpersonal interactions. Short, focused training modules, delivered on-line or in-person, can help identify language that can be (unintentionally) offensive, rude, or disrespectful.

3. Occupational health nurses can survey the physical and social environments in their workplaces to ensure that the work setting provides adequate flexibility to meet the needs of people living with mental illness. Examples include sufficient sunlight, designated areas for worker privacy, work station configurations that

avoid excessive stimulation for those with difficulty concentrating, and opportunities for peer support and collaboration (see the MHCC's *Guidelines for the Practice and Training of Peer Support*).

4. Occupational health nurses can advocate that employers offer and strengthen supports and benefits (such as sick days, personal medical leave, and mental-health days) available to all workers. These employee benefits are an important way to accommodate many mental health issues in the workplace. They allow workers living with mental illness to meet their needs without disclosing their functional impairments.

5. Occupational health nurses can encourage employers to build as much flexibility as possible into workplaces in terms of how, where and when people work. Organizations may already have

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Table 1
Organizations that Participated in the Study

Type of Business	Size ^a	Sector	Urban or Rural	Profit Orientation	Unionized
Café	Small	Consumer/ Survivor Run Social Enterprise	Urban	Aims for profit	No
Catering	Small	Private Social Enterprise	Urban	For-profit	No
Farming	Medium	Private	Rural	For-profit	No
Banking	Large	Crown Corporation	Urban and Rural	For-profit	Yes
Government	Large	Public	Urban and Rural	Government	Yes

Note: aSmall = < 100 employees. Medium = 100-500 employees. Large = > 500 employees.

such measures in place to allow employees to balance their work and personal lives. Depending on their job requirements, flexibility enables employees to choose the hours they start and end work, to work at home if their jobs allow, and to use technology such as video conferencing to replace in-person meetings. Because moving to flexible workplaces may require a shift in managerial styles, from traditional visual management to management by outcomes, managers may need training in the latter.

6. Occupational health nurses can initiate workplace peer-support groups for employees living with mental illness and other *episodic disabilities*. These may be invisible conditions that fluctuate from day-to-day and even hour-to-hour. Employee-led support groups can enable members to find other employees with similar work challenges who may offer emotional support and solutions. Together, employees can not only create awareness of episodic disability at work but can advocate for changes in their workplaces that enable people living with mental illness and other health conditions to

stay in their jobs. *The Episodic Disabilities Employment Network*, *Mental Health Works*, and *Workplace Strategies for Mental Health* are excellent resources for occupational health nurses.

7. Occupational health nurses can encourage employees living with mental illness and their supervisors to document and regularly review even informal accommodation arrangements. Employees with supportive managers they trust often negotiate informal arrangements rather than going through a formal process for accommodation. It is important to record these arrangements in writing, so that their nature and scope are clear, transparent, and so that they follow individuals as they move within an organization and continue to be honoured in cases of supervisor turnover. Processes for formal accommodation should remain in place for employees who do not have good relationships with their managers, whose managers do not support their requests for accommodation, or who do not wish to disclose their functional

limitations to their managers.

8. Occupational health nurses can initiate and support training for managers and human resources personnel in mental health issues and workplace accommodation strategies, such as the MHCC's *Working Mind* and *Mental Health First Aid* training. Not only can this training potentially help employees living with mental illness stay in their jobs, it can contribute to creating mentally healthier workplaces for all employees.

Occupational health nurses are in an excellent position to be champions of workplace wellness. They can lead the way by facilitating improvements in workplaces to help keep people living with mental illness employed. We encourage nurses to learn from practices that Canadian employers have used to retain these workers by reading our report, "The Clear Business Case for Hiring Aspiring Workers: Findings from a Research Project that Looked at the Costs and Benefits of Recruiting and Retaining People Living with Mental Illness". The report is being released April 12, 2018

and will be uploaded to the MHCC's website.

Margaret Oldfield, PhD, was Research Coordinator on the project, and **Rebecca Gewurtz**, PhD, was the Principal Investigator. Any questions can be directed to her at gewurtz@mcmaster.ca. **Emile Tompa**, PhD, the Institute for Work & Health, prepared the business case for accommodating workers with lived experience of mental illness. The other authors were members of the research team who were involved in planning the project, analyzing the data, and interpreting it.

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Resources

Episodic Disabilities Employment Network. <http://edencanada.ca/>

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Mental Health Works. <http://www.mentalhealthworks.ca/>

Workplace Strategies for Mental Health. <https://www.workplacestrategiesformentalhealth.com/>

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WHAT'S AHEAD POLITICALLY IN ONTARIO FOR 2018? by Jason Mandlowitz

As we move through 2018, occupational health nurses should be aware of a number of initiatives already underway in Occupational Health and Safety and related issue areas.

2017 was punctuated by the Government of Ontario's comprehensive review which led to significant changes to the province's key pieces of labour and employment legislation including the Labour Relations Act, Employment Standards Act, and Workplace Safety and Insurance Act. Implementation continues this year.

2018 will be impacted by the current Government agenda as well as public policy issues which emerge as we move towards the provincial election. Our examination of these trends began with the Ontario Progressive Conservative Party's first leadership date on February 15, 2018.

This article will focus on occupational health and safety and workplace safety and insurance issues which will require the attention of your workplaces.

Occupational Health and Safety

A. Proposed PTSD Presumption for Front-Line Nurses

On December 6 and 14, 2017, the Ontario Ministry of Labour proposed amending the "Supporting Ontario's First Responders Act" to extend the PTSD presumption to include special constables, civilian members of police services and up to 140,000 front-line nurses who provide direct patient care and are first responders facing traumatic situations. This was the Government's response to Private Member Bill 151, "Workplace Safe-

ty and Insurance Amendment Act (PTSD Benefits), 2017" introduced by Taras Natyshak, MPP, seeking coverage for nurses, health care workers providing close assistance to first responders, and workers other than police officers who provide public services or support the work of persons who provide police services.

B. Increased OHSA Maximum Fines

The "Stronger, Fairer Ontario Act" (Budget Measures), 2017 or Bill 177, received Third Reading and Royal Assent on December 14, 2017. As part of this omnibus bill, greatly enhanced maximum fines were announced. Fines under the Occupational Health and Safety Act (OHSA) increased from \$25,000 to \$100,000 for individuals and from \$500,000 to \$1,500,000 for corporations. The limitation period for filing charges under the OHSA had been within one (1) year of the act of default upon which the prosecution is based. With Bill 177, a prosecution may commence within the later of the previous limitation or one year from the date that an inspector becomes aware of the alleged offence which would have the effect of extending the limitation period well beyond the one-year limit.

Increases in fines will not be limited to the OHSA. On January 15, 2018, the Government announced increases to penalties issued by Employment Standards Officers under the Employment Standards Act (ESA). Penalties will increase from \$250 to \$350 for first offences; \$500 to \$700 for second offences, and \$1,000 to \$1,500

for third offences if they occurred within a three-year period.

C. Safe at Work Ontario Consultations, 2018-2019

On January 16, 2018, the Ontario Ministry of Labour initiated a consultation as part of the Ministry's compliance strategy to help promote safe and healthy workplace practices. The province-wide consultation is scheduled for January and February 2018 to allow stakeholders to comment on a number of issues. Consultation topics include: the identification and management of workplace risks and hazards; the efficacy of Ministry information and communication; the need for a guideline or code of practice for each sector; and the best way to ensure legislative and regulatory compliance and how to improve enforcement.

Participation in the consultations is through registration on Eventbrite or through written submissions to SAWOConsultations@ontario.ca.

D. Protection for Victims of Domestic or Sexual Violence

As of January 1, 2018, employers scheduling work for their employees will be impacted by new legislation which comes into effect where a worker or their child has experienced or is threatened with domestic or sexual violence. In such cases, the worker has a right to take up to seventeen weeks off work without fear of losing their job. Ten days may be taken at a time for medical appointments and up to fifteen weeks may be taken intermittently. This is part of the

Government's Sexual Violence and Harassment Action Plan.

E. Voluntary OHS Management System Accreditation and Employer Recognition Program for Ontario Workplaces

In 2017, the Ontario Ministry of Labour announced a consultation on an Occupational Health and Safety Management System Accreditation Standard (OHMHS) and employer recognition criteria which could form a voluntary program to encourage these systems. The consultation period ran to December 20, 2017. The draft OHMHS includes sections on Purposes and Objectives, Definitions, details on the operation of an OHMHS and element of the OHMHS Workplace Safety and Insurance.

Workplace Safety and Insurance

A. Traumatic and Chronic Mental Stress

Following from the Government's expansion of WSIB benefit entitlement for traumatic and chronic mental stress the "Stronger, Fairer Ontario Act" (Budget Measures), 2017 or Bill 177 provided a number of amendments to the Workplace Safety and Insurance Act in the form of transitional rules for benefit entitlement for mental stress claims arising prior to January 1, 2018. Bill 177 provided that workers or their survivors who had not filed a claim that took place between April 29, 2014, and January 1, 2018, will have until July 1, 2018, to file a claim which will be adjudicated by the WSIB under the adjudicative regime which

comes into effect at that time. April 29, 2014, was the date the Workplace Safety and Insurance Appeals Tribunal (WSIAT) issued decision 2157/09 and found the WSIB's chronic mental stress policy to be unconstitutional. Equally, for mental stress claims already filed in a timely manner and still pending before the WSIB on January 1, 2018, the Board will adjudicate them using the new adjudicative regime. It is noteworthy that by allowing for retroactivity to April 29, 2014, these claims appear to be subject to the new WSIB rate framework when it is implemented in 2020.

B. Community Mental Health Program

Timed to coincide with the January 1, 2018 rule changes, the



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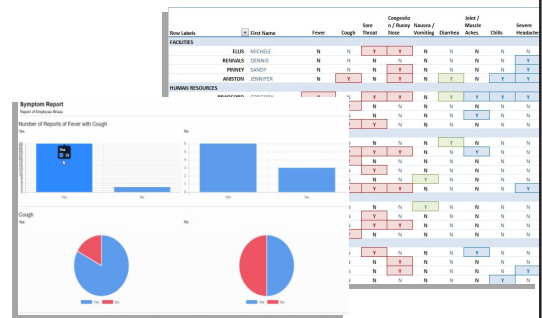
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KICS/SRII Features

- Pre-built online symptom reporting and return to work forms
- System informs the employee whether they are fit to attend work based on their responses
- Detailed custom notifications
- Built-in analytics help identify which areas are reporting which symptoms
- Easily filter and view specific responses
- Create your own additional online forms to gather even more - eg. Consent forms, intake info, feedback
- Dedicated KICS app for Android
- Export responses and further analyse in Excel



KICS is a division of Parklane Systems - Leading Occupational Health and Safety Software providers in Canada since 1987

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WSIB announced a new Community Mental Health Program to provide individuals access to psychological assessment and treatment in partnership with the Ontario Psychological Association. The program is designed for those who have a registered WSIB claim or recurrence, experience a psychological reaction secondary to a work-related physical injury or experience a psychological response to a workplace incident(s). WSIB is developing and will post an on-line directory of participating health care professionals in early 2018.

C. Independent Contractors

The "Fair Workplaces, Better Jobs Act, 2017" received Royal Assent on November 27, 2017. While this legislation brought attention to increases in the minimum wage and a number of significant new labour and employment issues, a noteworthy change addressed "independent operators". Changes to the Employment Standards Act, 2000, now prohibit employers from misclassifying employees as independent contractors. This was intended to address cases where employers improperly treated their employees as if they were self-employed and therefore would not be entitled to a number of statutory rights including WSIB coverage and benefits. The employer is now responsible for proving that an individual is not an employee. Employers may be aided in this process by applying the provisions and standards documented in the WSIA and WSIB policy which can serve as a checklist for determining individual employment status.

D. Impact of Minimum Wage Increases on WSIB Benefits

As of January 1, 2018, the Ontario minimum wage increased to

\$14.00 per hour. There will be a further increase to \$15.00 per hour on January 1, 2019.

The minimum wage increase will impact the Loss of Earnings for WSIB benefit recipients. Where an individual is employed, accepted for WSIB benefit entitlement, and their wage increases due to the minimum wage; the wage increase is being considered by the WSIB as a material change in circumstances that must be reported. The WSIB will then determine if the change in loss of earnings benefits is warranted. Where a person is not employed but is capable of working in a suitable occupation determined by the WSIB with a wage below the new minimum wage; the WSIB will consider the new minimum wage level at their next annual case review and determine if a change in loss of earning benefits is warranted.

E. Changes to the Calculation of Non-Economic Loss Benefits

Starting December 15, 2017, the WSIB determined it will no longer reduce benefits for workers with an asymptomatic pre-existing condition if it is non-measurable. At the same time, the WSIB will reconsider about 4,500 benefit decisions made between January 2012 and December 15, 2017, where there was a reduction in the quantum of the NEL award because of an asymptomatic pre-existing condition. Employers should expect experience rating adjustments if a new NEL award is accepted or the percentage of impairment is increased as a result

The employer is now responsible for proving that an individual is not an employee.

of this change in WSIB policy. For more information see the PDF WSIB Policy Clarification Memo to Staff dated December 15, 2017, and entitled "Pre-Existing Conditions and Permanent Impairments" available at this link.

F. Changes to the Calculation of Benefit Indexation

Each year the WSIB makes a cost of living adjustment to ensure benefit payments to workers and survivors keeps pace with inflation. Effective January 1, 2018, the WSIB will change the way benefit indexation is calculated and will increase all indexed benefit types by 1.5% impacting over twenty WSIB policies. Under the previous system annual indexation applied to most but not to all benefits. For more information visit the WSIB website and locate 2018 Indexation Changes available at this link.

Jason Mandlowitz is President of Mandlowitz Consulting and Paralegal Services (MCPS) offering employers workplace safety and insurance claims and financial issues management services. Jason has provided WSIB, health and safety, and human resource advocacy services to public and private sector employers since 1993. E: jem@mandlowitz.com



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