

Canadian Association of Hepatology Nurses Viral Hepatitis Competencies

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Canadian Association of Hepatology Nurses

Viral Hepatitis Competencies

The Canadian Association of Hepatology Nurses (CAHN) approved the Hepatology Nursing Standards in February 2007. The Standards provide a comprehensive framework for the evaluation of professional, ethical nursing practice in hepatology. Subsequently, a CAHN working group began to develop competency documents that describe core competencies specific to particular liver diseases/conditions. This *Viral Hepatitis Competencies* document is the first to be created. The viral hepatitis competencies pertain to adults. These competency statements **do not** include specifics for pediatrics or transplantation.

Purpose

The Canadian Association of Hepatology Nurses *Viral Hepatitis Competencies* document provides a mechanism for nurses to examine their practice, determine their learning needs and ultimately improve the quality of viral hepatitis care.

Introduction

The CAHN *Viral Hepatitis Competencies* document describes a full range of viral hepatitis nursing competencies without identifying educational preparation or specific experience needed for any of the competencies. The competencies are not intended to be prescriptive, rather they are meant to assist Nurses to identify learning needs appropriate for their particular practice context and seek educational support accordingly. This document can be used by Nurses for ongoing self-assessments and by nurses preparing to transition to cirrhosis practice, education, administration and/or research.

The competencies are described within four sections: fundamental knowledge, nursing assessment, interventions and evaluation. Each section contains several competency statements with accompanying knowledge expectations. The nursing assessment section is framed within the twelve determinants of health.

Embedded in the competencies are the assumptions that nurses' advocate not only at the individual but also at the policy or systems level and that nurses engage in collaborative practice.

As the document reflects current knowledge, CAHN will review and revise it at least every three years.

Viral Hepatitis Competency Statements

Section 1: Fundamental Knowledge Competencies

1.1 Explain the epidemiology of viral hepatitis (A, B, C, D and E)

- Local, provincial, and national prevalence and incidence
- Routes of transmission and contact tracing
- Indications for screening and risk factors
- Demographic characteristics
- Links with socio-economic factors
- Indication for vaccination
- Natural history in the course and development of acute versus chronic infection

1.2 Describe the normal anatomy and physiology of the liver

- Gross anatomy
- Histology
- Connection to systemic circulation and portal circulation
- Intrahepatic and extrahepatic biliary system
- Normal liver functions (e.g., vascular, metabolic and excretory functions)

1.3 Describe the pathophysiology and natural history of viral hepatitis

- Symptoms of acute disease
- Findings of chronic disease (e.g., often symptomatically silent, investigations, imaging)
- Symptoms of late stage disease
- Extrahepatic manifestations
- The effects of inflammation on liver histology
- How fibrosis and cirrhosis impair normal liver function
- The relationship between other diseases of the liver and viral hepatitis (e.g., fatty liver disease, genetic liver diseases)

Section 2: Nursing Assessment Competencies

2.1 Describe the importance of income and social status in viral hepatitis prevention, care and treatment

- The role of income security (e.g., employed, social assistance, retired)
- Types of income assistance available
- The impact of barriers such as unsafe housing, lack of food security and lack of affordable transportation on client health
- Strategies clients can use to access services such as alcohol treatment programs, travel support, and nutritional supplementation
- Access to medication coverage (e.g., private, provincial, NIHB) and eligibility

2.2 Explain the impact of stigma and discrimination

- Describe the different ways stigma and discrimination are experienced by those affected by viral hepatitis
- Describe how stigma and discrimination can affect health behavior
- Explain how discrimination can violate human rights
- Describe the importance of confidentiality and privacy as it pertains to viral hepatitis diagnosis and access to care
- Recognize and evaluate how personal values affect respectful relationships
- Understand how stigma by healthcare providers and community workers impacts access to testing, care and services

2.3 Explain the impact of the client's level of literacy

- Assess the client's understanding of information (e.g., reading, writing, expression and comprehension)
- Use of principles of adult learning (e.g., language that is appropriate to the client's education, literacy level and ethno-cultural context)
- Facilitate client access to evidence-based information (e.g., peer support groups, internet)

2.4 Explain the impact of employment/working conditions

- Explain the rights of the individual around disclosure (e.g., non-disclosure at work) and to have their confidentiality respected
- Knowledge of the impact of disclosure of a viral hepatitis diagnosis on employment/career choices
- Understand profession regulatory and legal requirements regarding disclosure of viral hepatitis diagnosis
- Promote safe work environments, free from stigma and discrimination, that respect human rights and confidentiality
- Explain transmission prevention and post exposure management

2.5 Understand the influence of social environments

- Importance and impact of social network e.g., community groups
- Access to community resources
- Describe how social media may positively or negatively impact personal health decisions

2.6 Understand the importance of physical environments

- Recognize how living situation can contribute to increased prevalence and transmission (e.g., crime, substance availability, endemic country)
- Describe how safe and affordable housing is fundamental to health
- Explain the contribution of the physical environment (i.e., air/ground/water quality, chemical/biological exposure, food)

2.7 Understand the importance of personal health practices and coping skills

- Education on transmission prevention and vaccination
- Promote optimal liver health (e.g., limited alcohol use, harm reduction, healthy eating, physical activity)
- Choices can be affected by socio-economic environments (e.g., self-care, advocacy and coping mechanisms)
- Self-esteem, self-worth and resilience can affect health practices

- Impact of historic trauma

2.8 Explain the importance of healthy child development

- Experiences in early life that can affect lifestyle choices and behaviors in adulthood (e.g., childhood obesity, trauma and family history of substance use)
- Recognize potential pediatric exposure via vertical/horizontal transmission
- Recognize the barriers that can exist in the transition from adolescent to adult care
- Recognize risk factors that can influence the progression of liver disease (e.g., childhood obesity, substance use, lack of access to testing and care)

2.9 Describe the role of biology and genetics

- Describe factors that affect viral clearance (e.g., co-infection, host immune response)
- Describe factors that affect disease progression (i.e., modifiable and non-modifiable)
- Identify significant co-morbidities (i.e., metabolic syndrome, coinfections and mental health/addictions)

2.10 Understand comprehensive viral hepatitis assessment

- Describe the data required in a nursing history (e.g., risk factors, symptoms)
- Understand clinical presentation and physical examination (e.g., tattoos, spider nevi)
- Describe serological testing, investigations, imaging
- Describe extrahepatic manifestations
- Interpret viral load, genotype, resistance testing, seroconversion

2.11 Describe the impact of health services on viral hepatitis

- Describe current health systems in the care cascade (e.g., testing, linkage, treatment)
- Importance of client self-advocacy
- Role of significant others in client advocacy
- Nurse's role in client advocacy

Nurses' role in advocating for health system change (e.g., improved access for care and medications, participation in advocacy organizations)

- Effect of stigma and discrimination on service access and utilization

2.12 Understand the role of gender

- Describe gender considerations that may affect acquisition
- Describe differences in gender on viral hepatitis disease progression and management
- The effect of hormones and pregnancy status (e.g., menopause, birth control, trans clients)

2.13 Understand the impact of culture

- Cultural implications related to viral hepatitis
- Culturally sensitive awareness (e.g., avoid actions that diminish, demean or disempower the cultural identity and well-being of an individual)
- Spiritual and religious beliefs impact decisions (e.g., natural healing beliefs)
- Recognize the impact of provider's values on relationships and client decision-making

Section 3a: Intervention Competencies (Client Focused)

3a.1: Describe health promotion activities associated with liver health

- Balance nutrition and exercise to maintain an ideal body weight
- Understand liver healthy diet
- Immunize to prevent co-morbidities (e.g. pneumovax, shingles, influenza, hepatitis)
- Avoid alcohol, tobacco, contraindicated prescriptions, substances, solvents and chemical irritants
- Understand transmission prevention

3a.2 Understand harm reduction philosophy, strategies and their effectiveness

- Explain harm reduction philosophy as it relates to viral hepatitis
- Describe harm reduction approaches and their effectiveness
- Understand the terminology utilized by those at risk for viral hepatitis and re-infection
- Understand emerging trends of harm reduction
- Advocacy for universal harm reduction practices, availability, and resources

3a.3 Understand the vaccines that are available to those with viral hepatitis

- Describe which types of viral hepatitis are vaccine preventable
- Explain how to access national and provincial immunization guidelines
- Describe professional requirements to safely administer vaccinations

3a.4 Understand complementary and alternative therapies

- Describe complementary and alternative therapies commonly used in viral hepatitis
- Symptom management (e.g., sleep hygiene, depression, anxiety)
- Counseling
- Teaching
- Complimentary/alternative therapies (e.g., herbal medications, massage, therapeutic touch, marijuana)
- Nutrition-based therapies (e.g., vitamin D)

3a.5 Understand the tests used to monitor clients during the acute phase for each hepatitis virus

- Describe the viral hepatitis serology of an acute infection (e.g., anti HBc IgM)
- Explain the reason for changes (deviation from the norm) that commonly occur in other serology (i.e., liver enzymes and liver function tests)
- Describe signs and symptoms
- Clinical presentation (e.g., jaundice, hepatic encephalopathy, impaired clotting, ascites)
- Laboratory results (e.g., INR, Creatinine, eGFR, electrolytes, AST, ALT, ALP, total bilirubin, albumin, platelets)
- Diagnostic test results (e.g., fibroscan, fibrotest, liver biopsy or liver ultrasound)

3a.6 Understand available anti-viral therapies used to treat adult clients with chronic hepatitis B, C, D and E infection (pre and post liver transplant)

Hepatitis B

- Describe the current anti-viral therapy(s) and the process to access treatment for chronic hepatitis B infection
- Explain the principles of antiviral resistance in relation to chronic hepatitis B therapy
- Describe contraindication/s to initiating hepatitis B therapy
- Explain side-effects and management of hepatitis B therapy
- Describe future treatments in development
- Describe the current anti-viral therapy(s) and the process to access treatment for chronic

hepatitis B infection

Hepatitis C

- Describe the current anti-viral therapy(s) and the process to access treatment for chronic hepatitis C infection
- Explain the differences in regimen and options, according to the hepatitis C genotype
- Describe contraindications to initiating treatment
- Describe side-effects and management of hepatitis C therapy
- Understand drug to drug interactions

3a.7 Describe tests that are used to monitor a client during therapy for chronic hepatitis B, C,D and E (pre and post liver transplant)

- Explain the rationale for laboratory monitoring as detailed in the Canadian Consensus Guidelines

Section 3b: Intervention Competencies (System Focused)

3b.1 Recognize methods to effect policy change

- Describe the role of employers, nonprofit/community organizations, and municipal, provincial and federal governments in viral hepatitis prevention, care, and treatment
- Describe nursing activities that can influence policy change (e.g. participation in policy development and systems advocacy)
- Recognize systems and processes that effect viral hepatitis care and treatment (e.g., clinical drug review, government pharmaceutical coverage and social services)

3b.2 Recognize methods for ongoing learning

- Explain the importance of lifelong learning on nursing practice
- Describe the role of membership in a professional association
- Explain the value of reflective practice in maintaining continuing competence

3b.3 Recognize the importance of collaboration

- Identify and collaborate with other providers and support systems (e.g., mental health and addictions services, local community support groups)
- Identify and participate (as appropriate) in local, provincial, national and international health and social service initiatives

Section 4: Evaluation Competencies

4.1 Evaluate clinical effectiveness, client responses, efficiency, cost effectiveness, and ethical considerations of interventions for clients

- Evaluate the overall effect of interventions based on a synthesis of client data
- Monitor progress towards targeted outcomes within the care continuum from prevention to palliation (i.e., primary, secondary, tertiary, quaternary)
- Facilitate modifications as needed (e.g., increasing treatment demand)
- Document clients care outcomes
- Communicate outcomes to appropriate health care professionals/agencies

4.2 Participate in the dissemination of new knowledge in hepatology nursing

- Disseminates outcomes of changes in viral hepatitis nursing practice to diverse internal and external stakeholders
- Participate in research and/or the dissemination of findings applicable to viral hepatitis practice