Liver Disease: Management and Care of Patients - 6KNIN337

Level: 6
Credits: 15

Module leader: Adam Riedlinger
Email: adam.riedlinger@kcl.ac.uk

Module deputy: TBC

This handbook must be read in conjunction with module information provided on KEATS, the King’s E-Learning And Teaching Service. You will be given access to KEATS on enrolment. Important information relating to assessment and related regulations can be found in the Postgraduate Programme Handbook, available on KEATS and via the Student Services Centre.

This handbook can also be provided in alternative formats (such as large print) upon request to asc@kcl.ac.uk.
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Module overview
This module forms part of the BSc Nursing Studies. The module contributes to your programme of study by providing an overview of the current evidence base surrounding the diagnosis & treatment of common liver diseases.

The module can also be taken as a freestanding module.

Module aim
This module will enable practitioners to develop their knowledge base in caring for patients with liver disease. The focus will predominately be on chronic liver disease, although the course will provide an overview of acute liver failure and transplantation.

Learning outcomes
The learning outcomes of this course meet some of the nine liver care competencies as set out by the Royal College of Nursing, NHS Liver Care and the Department of Health in the 'Caring for people with liver disease: a competence framework for nursing' (2013).

1. Analyse and apply the evidence base that underpins the medical and nursing management of patients with liver disorders, both in a Hepatology or general setting.

2. Appraise the knowledge and skills needed for assessment planning, delivery and evaluation of care for patients with liver disease

3. Appraise and evaluate the contribution of nursing and other professional groups in the management and delivery of effective care to patients with liver disease

4. Analyse the factors influencing health care promotion for patients with liver disease

5. Examine the factors which determine the provision of health care resources taking into account the importance of cost, efficiency, quality and resources available

Teaching arrangements
The educational approach is adult student centred, which builds on your experience as a qualified practitioner. You will experience a wide variety of teaching and learning strategies:

- Lecture and discussion
- Group work
- Tutorials
- Guided study
- Quiz
- Independent study
- Case study exploration
- E-learning
Submitting coursework
For this module you are assessed by Adam Riedlinger. All assessments are submitted online via TurnItIn (through the KEATS site)

Assessment criteria
Essay — 2,000 words. This constitutes 100% of the overall grade.

You will demonstrate an achievement of the course learning outcomes by writing an assignment addressing either a liver disease or a complication of liver disease as identified in a patient-based case study.

Formative assessment

Students are advised to seek tutorial support from the course lecturer. This should be a student led discussion focusing on the students' essay. The student should provide a plan in which the key themes are identified along with relevant literature using the bullet points below.

- Which patient case study have you chosen?
- What disease/complication aspect will you focus on?
- Identify the key references which you will use to support the pathophysiology/management of the chosen aspects
- Is the evidence clear? Are there any opposing views? How does it relate to your practice?

Summative assessment

- Your assignment must be in a structured essay format, but sub headings may be used. It should include an introduction, main body and conclusion
- Critically appraise the management of either the chosen liver disease or complication of liver disease which may be carried out to address the patients’ health care needs, this must include a critical appraisal of the nurses’ role and nursing practice in relation to the identified management
- Critically analyse the evidence-based literature in relation to both the patients problem, interventions and nursing management
- Make recommendations for future nursing practice in relation to your analysis of the interventions and nursing management of your identified complication
- Your assignment needs to be appropriately referenced using the JAN referencing system (please see post-registration handbook for guidance).
Coursework submission are provided on the modules KEATS site. It is essential that you use your candidate number on all assignments/examinations. Your candidate number, which will begin with **X for the academic year 2016/17**, will be available via Student Records on the King’s Intranet approximately one month after you enrol.

If you are unable to submit your work by the deadline please refer to the information in your programme handbook on “mitigating circumstances”. If you require further support in these circumstances you are advised to contact KCLSU.

**Submission date for coursework: 18 July 2017**

**Resubmission: 17 October 2017**

Late submissions will be accepted for **24 hours** following the submission date. All work submitted late will be marked as normal but will be capped at the pass mark for the module. If your assignment is a hard copy please ensure you date stamp it and submit it to the submission room G15 James Clerk Maxwell Building. If your assignment is submitted electronically through TurnItIn, information about how to submit late will be provided on KEATS module sites under assessment information. Please label the file with your candidate number and double-check you have submitted the correct file.

The external examiner for this module is **Karen Staniland**. Students are not to make direct contact with external examiners, in particular regarding their individual performance in assessments.

The College and its Examination Boards in the ten Faculties (Institutes/Schools, King’s Learning Institute and the Association of King’s College (AKC), work with over 500 external examiners to ensure the quality and standard of our taught awards. Find the latest report on the External Examiners Report page, navigate to the Faculty of Nursing and Midwifery section.

**Results and resubmissions for coursework**

Students will receive a provisional (unratified) mark for their coursework 4 weeks following submission. According to the method of submission as detailed on your KEATS site, if your work was submitted online you will be able to download marked coursework from KEATS; alternatively, if you completed a hard copy submission you can collect your coursework and feedback from the Student Services Centre.

To collect a hard copy assignment, you must provide your candidate number. Alternatively, you may send a stamped addressed envelope to the Student Services Centre ensuring that this is large enough to accommodate your assignments and that you have applied sufficient postage. Hard copy assignments will be retained for four weeks; if you have not collected your assignment by then, it will be destroyed.

Feedback will include the award of a numerical grade which remains provisional until ratified by the examination boards. The dates for the examination boards are available on KEATS. Ratified marks can be viewed via Student Records on the King’s Intranet, the Monday following the relevant examination board.

The marking criteria by which your work is judged are provided in full in your programme handbook. Please also refer to the section in your programme handbook on plagiarism and how to avoid it. If you have a query about how to refer to a specific piece of work please ask your module leader, your group leader or a member of library staff for guidance or please use King’s Libguides site.
The feedback you receive on your assignment will guide you towards how to do better next time or how to maintain your existing high standard!

If you do not understand your mark or the feedback you receive please contact Adam Riedlinger.

If you are unsuccessful, it is recommended that you contact the module leader before submitting your second attempt. This will enable the module leader to provide you with an appropriate level of support as you prepare to resubmit your work.
Learning outcomes and resources

**General reference**


**Day 1**

**Session 1 – Course Introduction, Ice Breaker and Quiz**

By the end of this session the students will be able to:
- Demonstrate familiarity with the course structure and content
- Demonstrate familiarity with other course students
- Understand the principles of e-learning and self-directed learning
- To understand how to access KEATS liver disease module 6KNIN337
- Differentiate between acute and chronic liver disease
- Acknowledge the common aetiologies of liver failure
- Understand the anatomy of the Liver and the main functions

**Indicative reading**
Module Handbook
Post-Qualification Handbook


**Session 2 – Chronic Liver Disease; Setting the Scene**

By the end of the session students will
- Understand the UK prevalence of chronic liver disease
- Understand the most common aetiologies
- Recognise stigmata of chronic liver disease and reasons for these

**Indicative reading**
Session 3 – The Effect of Chronic Liver Disease on other Body Systems (Respiratory and Cardiovascular)

By the end of the session the student will be able to

- To analyse the respiratory and cardiovascular complications of chronic and acute liver failure
- To revise the relevant pathophysiology
- To examine current treatments and evaluate effectiveness
- To explore the current nursing management of respiratory and cardiovascular complications in patients with liver diseases.

**Indicative reading**


Session 4 – Understanding and Assessing a Patient’s Liver Function and Dispelling the Myths about Haemostasis

By the end of the session the students will be able to:

- Differentiate between liver enzymes and liver function tests
- To analyse normal and abnormal values and the relation to liver disease
- To understand how Haemostasis changes in liver disease
- To debate appropriate interventions and precautions in managing coagulopathy in liver disease.

**Indicative reading**


Day 2

Session 1 – Portal Hypertension and the Management of a Patient with a Variceal Haemorrhage

By the end of the session the student will be able to
- To revise the pathophysiology of portal hypertension and formation of varices
- To demonstrate knowledge of the SIGN guidelines for management of variceal bleeding
- To examine the emergency and long-term treatment strategies for portal hypertension

Indicative reading


Session 2 – Ascites and Management

By the end of the session the student will be able to
- To examine the pathophysiology of ascites and diagnostic criteria
- To analyse the dietary, medical and surgical approaches to the management of patients with ascites
- To analyse and evaluate the nursing management of patients with ascites.

Indicative reading

Session 3 – Acute Kidney Injury and Hepatorenal Syndrome in Chronic Liver Disease

By the end of the session the student will be able to

- To identify causes of acute kidney injury in patients with chronic liver disease and some of the management strategies
- To demonstrate increased understanding of the pathophysiological factors underpinning hepatorenal syndrome and the international ascites club diagnostic criteria
- To examine the current medical and nursing strategies for patients with hepatorenal syndromes

Indicative reading


Session 4 – Nutrition in chronic liver disease

By the end of the session the student will be able to

- To revise the alterations in energy metabolism found in chronic liver disease
- To review current treatment therapies and effects
- To analyse and review current nursing management.

Indicative reading


Day 3

Session 1 – Hepatic Encephalopathy and Management in Chronic Liver Disease

By the end of the session the student will be able to
- To revise the pathophysiology and underlying theories of hepatic encephalopathy
- To review current treatment therapies and effects
- Have an understanding of future therapies
- To analyse and review current nursing management

Indicative reading


Session 2 – Acute pancreatitis

By the end of the session the student will be able to
- To revise the pathophysiology and underlying theories of pancreatitis
- Explore current epidemiology both worldwide and UK
- To review current treatment therapies and effects
- To analyse and review current nursing management

Indicative reading


Wu, Bechien U., and Peter A. Banks. "Clinical management of patients with acute pancreatitis." Gastroenterology 144.6(2013), 1272-1281.
Session 3 – Viral Hepatitis

By the end of the session the student will be able to

- Understand the current modes of viral transmission of hepatitis
- Explore current epidemiology both worldwide and UK
- Analyse serological tests for the diagnosis and treatment of Hepatitis
- Understand current treatment options for patients with Hepatitis

Indicative reading


http://www.easl.eu/assets/application/files/ef520780b91cf4f_file.pdf accessed 13/6/14


Session 4 – Assignment Workshop

By the end of the session the student will be able to

- Understand the requirements of the module assessment
- Have an understanding of academic writing style and standards
- Have an understanding of plagiarism & how to avoid it

Indicative reading

Postqualification handbook

University plagiarism guidance (can be found via KEATS)
**Day 4**

**Session 1 – Hepatocellular, Hepatobiliary and Pancreatic Carcinomas**

By the end of the sessions the student will be able to
- To examine the incidence of Liver related cancers in the United Kingdom
- To review both medical and surgical treatment strategies
- Demonstrate increased understanding of the postoperative complication of hepatobiliary surgery and procedures
- To examine current nursing management strategies for patients with liver related cancers.

**Indicative reading**


**Session 2 – Overview and Management of Alcoholic Related Liver Disease**

By the end of the session the student will be able to
- To analyse current incidence and impact on the health service
- To examine the pathophysiology of alcoholic liver disease, including fatty liver, alcoholic hepatitis and cirrhosis
- To appraise current management for both ALD and alcoholic hepatitis

**Indicative reading**

Government alcohol strategy March 2012  
Session 3 – The Jaundiced Patient

By the end of the session the student will be able to

- To revise the anatomy and physiology of liver cells and biliary system to understand the flow of bile
- To examine the differences between conjugated and unconjugated bilirubin
- To examine the pre hepatic, hepatic and post hepatic causes of jaundice
- To analyse current treatments and nursing management
- To analyse and evaluate the psychological impact of altered body image.

Indicative reading


Session 4 – Non-Alcoholic Fatty Liver Disease

By the end of the session the student will be able to

- To understand the increasing incidence of NAFLD
- To examine the underlying pathophysiology, disease presentation and associated complications
- To review the current evidence base management strategies.

Indicative reading


Session 5 – Primary Biliary Cholangitis and Primary Sclerosing Cholangitis

By the end of the session the student will be able to

- To review the basic pathophysiology of cholestatic liver diseases
- To examine diagnostic testing and signs and symptoms
- To examine disease related complications
- Appraise the effectiveness of current medical, surgical and nursing management

Indicative reading

Fullwood D. (2009) The Diagnosis and Treatment of patient with Primary Sclerosing Cholangitis; Gastrointestinal Nursing 7(5), 38-42.

Day 5

Session 1 – Acute Liver Failure

By the end of the session the student will be able to

• To examine the clinical presentations of hyper acute, acute and sub-acute liver failure.
• To recognise the main aetiologies of acute liver failure
• To examine clinical presentation and nursing management of encephalopathy and cerebral oedema, renal failure, coagulopathy, metabolic, cardiovascular and respiratory complications in acute liver failure
• Consider the indications for referral and transplantation criteria
• Evaluate the current and future research of acute liver failure management

Indicative reading


Session 2 – Introduction to Immunosuppression for the Post-transplant Patient

By the end of the session the student will be able to

• To examine current Immunosuppression therapies in transplantation
• To look at Immunosuppression for the treatment of specific diseases of the liver.

Indicative reading

Session 3 – Liver Transplant Assessment for Patients with Chronic Liver Disease

By the end of the session the student will be able to

• Appraise the current transplant assessment and listing criteria for chronic transplant recipients.

Indicative reading

Module evaluation
At the end of the module you are requested to complete the short online evaluation which will be available on your module KEATS site. Student evaluations are very important to us and are required by Health Education England and the regional London Local Education and Training Boards.

Action from previous evaluations

1. Assignment changed to avoid unintended plagiarism
2. Presentations made available prior to sessions
# Timetable

Subject to change due to speaker availability.

## Liver Disease: Care & Management of Patients

<table>
<thead>
<tr>
<th>Teaching mode</th>
<th>Date</th>
<th>Type of Session</th>
<th>Title</th>
<th>Time</th>
<th>Lecturer</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>University based study</td>
<td>3 May 2017</td>
<td>Introduction</td>
<td>Welcome and introduction to the liver course</td>
<td>11:00-11:30</td>
<td>Adam Riedlinger</td>
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<tr>
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<td></td>
<td>Lecture</td>
<td>Introduction to the anatomy &amp; physiology of the liver</td>
<td>11:30-12:15</td>
<td>Sheela Vinu Kurian</td>
<td>WBW LG11</td>
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<tr>
<td></td>
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<td></td>
<td>Chronic liver disease: setting the scene</td>
<td>12:15-13:00</td>
<td>Adam Riedlinger</td>
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<td></td>
<td>The effect of chronic liver disease on other body systems (Respiratory and cardiovascular)</td>
<td>14:00-15:00</td>
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<td></td>
<td>Understanding liver biochemistry and dispelling the myths about Haemostasis</td>
<td>15:00-16:00</td>
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<tr>
<td>Day 2</td>
<td>4 May 2017</td>
<td>Self-study/e-learning</td>
<td>Tutorial appointments available</td>
<td>10:00-11:00</td>
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<td>JCMB 2.43</td>
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<td>Lecture</td>
<td>Portal Hypertension and managing a patient with a variceal bleed</td>
<td>11:00-12:00</td>
<td>Sheela Vinu Kurian</td>
<td>WBW G8</td>
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<td></td>
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<td></td>
<td>Ascites and management in patients with Chronic Liver disease</td>
<td>12:00-13:00</td>
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<td></td>
<td>Hepatorenal syndrome and renal complications</td>
<td>14:00-15:00</td>
<td>Adam Riedlinger</td>
<td>FWB G.80</td>
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<td>Nutrition in liver disease</td>
<td>15:00-16:00</td>
<td>Nicole Rainford</td>
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<tr>
<td>Day 3</td>
<td>5 May 2017</td>
<td>Self-study/e-learning</td>
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<tr>
<td>Lecture</td>
<td>Managing patients with Hepatic Encephalopathy in Chronic Liver disease</td>
<td>11:00-12:00</td>
<td>Adam Riedlinger</td>
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<tr>
<td>Lecture</td>
<td>Acute Pancreatitis</td>
<td>12:00-13:00</td>
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<tr>
<td>Lecture</td>
<td>Viral Hepatitis</td>
<td>14:00-15:00</td>
<td>Kath Oakes</td>
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<tr>
<td>Lecture</td>
<td>Essay workshop</td>
<td>15:00-16:00</td>
<td>Adam Riedlinger</td>
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<th>8 May 2017</th>
<th>Self-study/e-learning</th>
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<tbody>
<tr>
<td>Lecture</td>
<td>HPB cancers</td>
<td>11:00-12:00</td>
<td>Wendy Martin</td>
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<tr>
<td>Lecture</td>
<td>Alcohol related liver disease</td>
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<tr>
<td>Lecture</td>
<td>Causes of jaundice and care of the jaundiced patient</td>
<td>14:00-15:00</td>
<td>Adam Riedlinger</td>
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<tr>
<td>Lecture</td>
<td>NAFLD</td>
<td>15:00-15:30</td>
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<tr>
<td>Lecture</td>
<td>PBC/PBC</td>
<td>15:30-16:00</td>
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<thead>
<tr>
<th>Day 5</th>
<th>9 May 2017</th>
<th>Self-study/e-learning</th>
<th>Tutorial appointments available</th>
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<tbody>
<tr>
<td>Lecture</td>
<td>Acute Liver Failure and transplantation</td>
<td>11:00-12:30</td>
<td>Adam Riedlinger</td>
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<tr>
<td>Lecture</td>
<td>Immunosuppression for the post-transplant patient</td>
<td>12:30-13:00</td>
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<tr>
<td>Lecture</td>
<td>Issues in Transplantation for patients with chronic liver disease</td>
<td>14:00-16:00</td>
<td>Wendy Littlejohn</td>
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</tbody>
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**Location key:**

FWB – Franklin-Wilkins Building, Waterloo Campus
JCMB – James Clerk Maxwell Building, Waterloo Campus
WBBW – Waterloo Bridge Wing