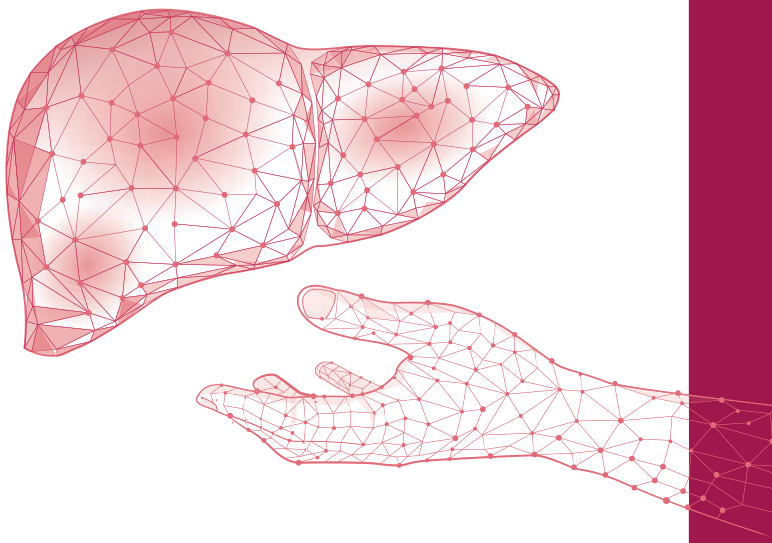
Liver Nursing Supplement



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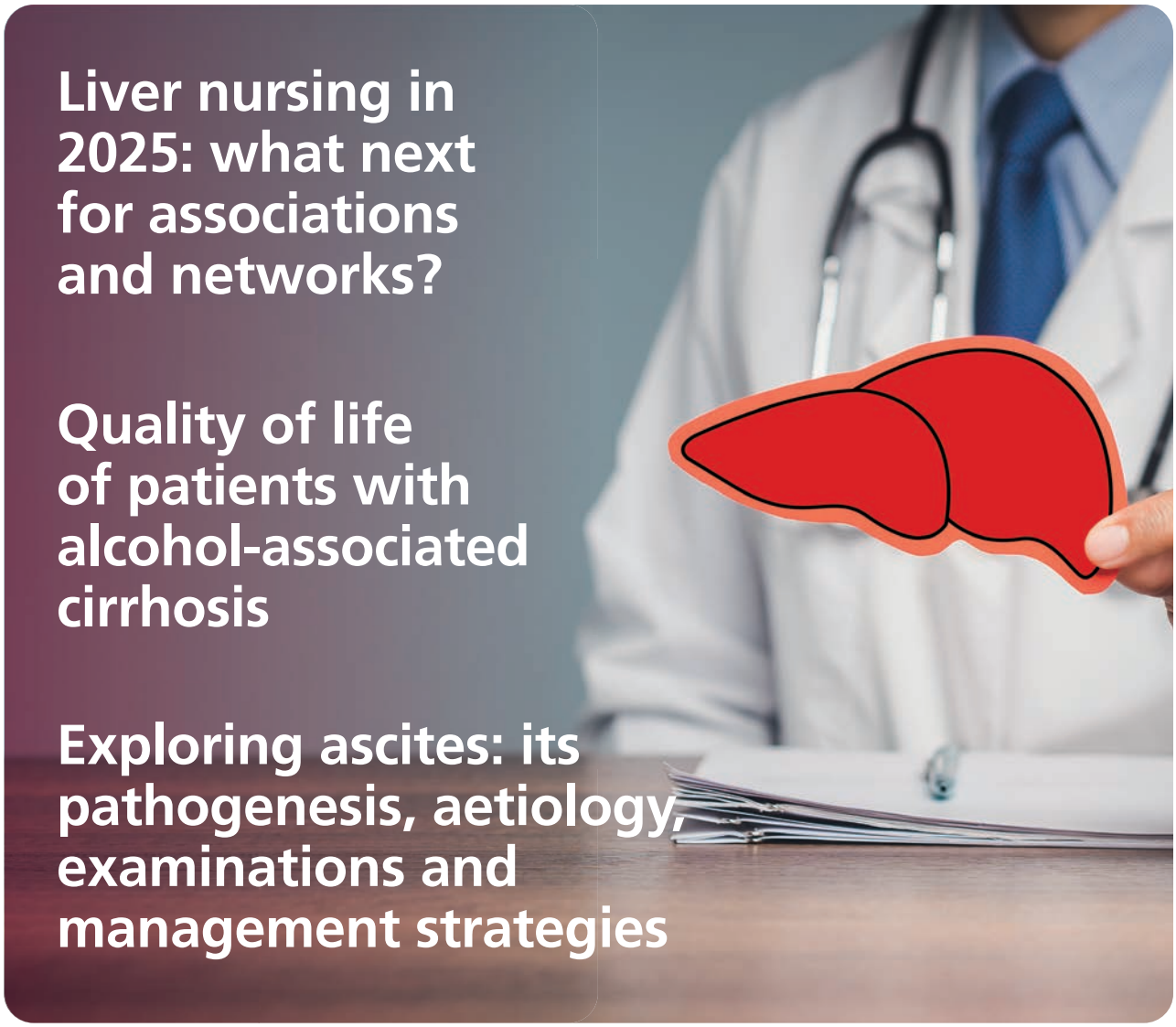

Liver nursing in 2025: what next for associations and networks?

Quality of life of patients with alcohol-associated cirrhosis

Exploring ascites: its pathogenesis, aetiology, examinations and management strategies

In association with BLNA British Liver Nurses' Association

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Liver Nursing Supplement

Safe injecting: a way to tackle hepatitis?

Safe injecting facilities, also known as drug consumption rooms aim to mitigate the prevalence of hepatitis B virus (HBV) and hepatitis C virus (HCV). A significant milestone has been achieved at *The Thistle* in Glasgow and *Merchants Quay Ireland* in Dublin, establishing the first safe injecting facilities (SIF) in both the UK and Ireland, respectively. The global burden of HCV and HBV among individuals who inject drugs presents a substantial public health challenge. Unsafe practices, particularly the sharing of drug-taking paraphernalia, remain the primary factors contributing to the transmission of HCV and HBV among this demographic. SIFs have emerged as a harm-reduction strategy designed to alleviate these risks while providing a conduit to healthcare and treatment.

SIFs effectively mitigate the transmission of HCV and HBV by supplying sterile injecting equipment and creating a controlled environment in which healthcare professionals supervise drug usage among people who inject drugs (PWID). SIFs encourage adopting safer injection practices, decreasing the likelihood of blood exposure and related infections (Artenie et al, 2023).

Evaluations of European facilities suggest that PWID who engage with SIFs are more likely to adopt safer injection practices compared to their counterparts who do not. These findings underscore the crucial role of SIFs in curtailing the transmission of HCV and HBV by promoting safer behaviours among PWID. Besides their role in harm reduction, SIFs serve as critical access points for healthcare services, encompassing HBV vaccination, HCV testing and linkage to treatment options. Although HBV is preventable through vaccination, coverage rates among PWID remain insufficient. Integrating vaccination programmes within SIFs is essential for improving coverage and reducing the incidence of HBV (Springer, 2020).

Early detection and treatment are imperative for mitigating transmission rates regarding HCV, for which no vaccine currently exists. SIFs provide on-site or referral-based HCV testing and facilitate access to direct-acting antiviral therapies, recognised for their high cure rates. PWIDs who engage with harm reduction services are more likely to complete HCV treatment, contributing to broader elimination initiatives

SIFs represent an established public health intervention that effectively diminishes the risk of both HCV and HBV transmission among PWID. By supplying sterile equipment, promoting safer injection practices, and facilitating access to vaccination and treatment, SIFs play a vital role in combating viral hepatitis. As many jurisdictions contemplate adopting harm reduction strategies, incorporating SIFs within broader healthcare frameworks will enhance their efficacy and improve health outcomes for marginalised populations (Degenhardt et al, 2019). The International Nurses Society on Addictions Europe recommend the use of these facilities as positive harm reduction interventions, improving care for PWID. **GN**

Adrian Jugdoyal, Student Nursing Associate Apprenticeship Programme Lead, Division of Nursing College of Health, Medicine and Life Sciences, Brunel University of London; Gastrointestinal Nursing Liver Supplement Board Member

Artenie A, Stone J, Fraser H et al. Incidence of HIV and hepatitis C virus among people who inject drugs, and associations with age and sex or gender: a global systematic review and meta-analysis. Lancet Gastroenterol Hepatol. 2023;8(6):533–552. https://doi.org/10.1016/S2468-1253(23)00018-3

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Liver nursing in 2025: what next for associations and networks?

This article provides an overview of recent initiatives and meetings spearheaded by the British Liver Nurses' Association, leading organisations, associations and networks that operate in the liver nursing space.

Katharine Caddick, Dianne Backhouse, Sue Eldred, Teesha Joshy and Katrina Snowden
dianne.backhouse@nhs.net

Katharine Caddick reviews evaluations from the British Liver Nurses' Association's annual meeting in October 2024. Dianne Backhouse discusses her new role as Chair Elect along with an overview of the British Association for the Study of the Liver's recent news and events. Sue Eldred provides an update on liver nurse networks in addition to a reminder of what current networks are in operation. Teesha Joshy's social media update also incorporates an overview of liver-related awareness days and events. Finally, Katrina Snowden discusses sustainability—a topic that should be on everyone's agenda.

BLNA 2024 Annual Meeting

The British Liver Nurses' Association annual meeting, held in October 2024, was attended by a range of delegates, including hepatology clinical nurse specialists, transplant coordinators, research nurses, liver nurse advanced clinical practitioners, associates and transformational leads. Sixty delegates completed the evaluation. All respondents highlighted the high quality of the presentations, with the Transplant Collaborative Approach and the contributions of two inspiring patients cited as standout moments. There was also strong appreciation for the practical sessions on interpreting liver tests, understanding aetiology and managing liver disease.

Delegates raised questions regarding the future role of bursaries in facilitating delegate attendance to such meetings, which the BLNA reiterated their commitment to continuing. Funding was discussed as a vital resource in helping delegates overcome conventional barriers to attending the meetings, such as childcare, costs and time away from work.

The importance of online webinars and face-to-face networking was also emphasised, with most delegates preferring to attend in person for day-long meetings. It was encouraging to see that over half of the delegates were connected with regional or local networks, while others were affiliated with the British Society of Gastroenterology, European Association for the Study of the Liver or the British Transplant Society.

Barriers to joining the committee were also noted, including time constraints, workload and a lack of delegate confidence. To address this, the BLNA has introduced a 'taster year' for potential applicants. Similarly, challenges around abstract submissions were highlighted, including time pressures and confidence. In response, the BLNA plans to hold an abstract workshop to support the abstract submission of delegate's excellent work at future meetings.

Chair Elect

Chair Elect is a new role in the BLNA committee that was established in 2024. The purpose is to proactively support succession planning within the committee. Despite the valuable experience and responsibilities of being a committee member, the transition from committee member to BLNA Chair is a huge undertaking. Therefore, the Chair Elect role was established incorporating support with a 12-month period of intense mentoring by the existing Chair to facilitate a smooth transition of the incoming Chair in October 2025. Dianne Backhouse was appointed Chair Elect in October 2024. She said:

> *'Having joined the BLNA committee in 2020, I am excited for what 2025 will bring in my new role as Chair Elect. The nurturing and support provided by the BLNA committee over the last 4 years has given me the confidence to undertake this new role. I look forward to working with the wider BASL committee, and collaborating with other organisations committed to liver care such as the UK Liver Alliance'.*

British Association for the Study of the Liver news

The fantastic city of Belfast will host the British Association for the Study of the Liver's (BASL) 2025 annual meeting, at the fabulous Belfast International Conference Centre. As usual, the meeting will include contributions from the BLNA and the British Liver Transplant Group (BLTG). The BLTG meeting will take place on Tuesday 7 October, while the BASL annual meeting will be a 3-day event between Wednesday 8 October to Friday 10 October 2025.

The BLNA annual meeting will last for a day and a half, from the afternoon of Wednesday 8 October to the end of the day on Thursday 9 October 2025. This year, the BLNA have the pleasure of collaborating with liver and gastroenterology nursing colleagues from Northern Ireland and the Republic of Ireland.

The BLNA are working together to create an excellent programme, with sessions covering a wide variety of topics relevant to the liver nursing community. The programme will include regular sessions, such as talks on liver disease in bite-size pieces, as well as oral abstract presentations, case studies, research updates, service developments, patient stories and much more.

As always, the BLNA encourage liver nurses to submit an abstract with a view to a poster and/or an oral presentation. The association can help those interested in writing an abstract and need support.

The BLNA appreciate that travelling to Belfast may be challenging, and are proactively working to secure funding for bursaries to support delegates in being able to attend. Information

BLNA
British Liver Nurses' Association

Including BLNA NURSE MEETING

8th October PM
9th October

SAVE *The Date*

7th - 10th October 2025 | BASL Annual Meeting

Join us at the **ICC Belfast**

Annual Dinner at the **Titanic Belfast**

visit www.BASL.org.uk

Abstract Submission and Registration Opening Soon

We hope you can make it

on registration, bursaries and abstract submission will be available at www.basl.org.uk in the coming months. We look forward to seeing you in Belfast in October 2025.

BASL X-tra

Following the success of previous BASL X-tra online educational conferences, this year's multi-professional liver learning event will take place on the afternoons of Tuesday 29 April, Wednesday 30 April and Thursday 1 May 2025.

The joint BASL/BLNA session on Wednesday 30 April will have a focus on decompensated cirrhosis. The other days will be themed around immune-mediated liver disease, while a liver grand round will include a variety of interesting cases. The full programme and registration details will be available at www.basl.org.uk very soon.

BASL Special Interest Groups

Special Interest Groups (SIGs) were initially established to promote and encourage collaborative research and clinical trials in liver disease. More recently, these groups have evolved to encompass a more multi-disciplinary clinical focus. These groups are supported by the British Society of Gastroenterology and are aligned to topic areas recognised by the Hepatology Clinical Research Network of the National Institute for Health Research. These topic areas include:

- Acute liver failure
- Alcohol-related liver disease
- Cholangiocarcinoma-UK
- End-of-life care
- Hepatitis B
- Hepatocellular carcinoma-UK
- Immune
- Metabolic dysfunction-associated steatotic liver disease
- Portal hypertension
- Rare diseases, such as Wilson's disease, alpha-1antitrypsin deficiency and haemochromatosis
- Acute-on-chronic liver failure (including frailty and sarcopenia) (a new SIG).

As part of your BASL/BLNA membership, you can join any of the SIGs and be invited to both virtual and face-to-face meetings.

Webinars

As a BASL/BLNA member, you can attend monthly educational webinars with contributions from:

- BASL School of Hepatology
- Multidisciplinary team educational webinar series
- BASL/BSG alcohol use disorders series
- BLTG Transplant School
- BLNA
- British Hepatology Pharmacy Group
- British Association for Allied Healthcare Professionals in Liver

See www.basl.org.uk for upcoming webinar dates, SIG meetings and other events.

Liver nurse networks

Over 12 months ago, the BLNA started the process of locating and assimilating details of regional liver nurse networks, with the aim of producing a comprehensive directory.

The directory is now complete and can be found on the BLNA webpage at www.basl.org.uk alongside some tips and hints about starting and sustaining liver nurse networks. The current directory is also listed below. If you are a member of a network not included, or you know of any liver networks missing from the directory then please drop an email to admin@basl.org.uk. We are aiming to make the directory as comprehensive as possible and do not want to miss anyone out.

The BLNA knows what a powerful tool networking can be, empowering healthcare professionals to expand their knowledge, providing access a multiplicity of opportunities for learning, collaboration and professional support, contributing to a broader professional community and, as a result, enhancing patient care.

The value nurses place in networking is reflected in feedback from the recent BLNA conference in Harrogate in October 2024, where 35% of respondents stated that they enjoyed the networking aspect of the conference the most. If you are not a member of a network, please consider joining your local network.

Although formal liver networks provide structured and consistent networking, there are many other opportunities and ways to harness the benefits of networking if the option of joining a liver nurse network is not open to you. By joining professional organisations, actively participating in social media, joining nursing-specific forums, attending conferences and seminars, local or national meetings or connecting informally with colleagues, you can start building your network. A comprehensive list is provided in ***Table 1***.

Social media update

The BLNA is active on the social media platform 'X', and use the handle @livernursing. If you are not already following the BLNA, please do so. The account aims to provide regular updates on exciting news in hepatology. @livernursing serves as a platform to connect with the liver nurse community, other healthcare professionals and share educational resources.

The BLNA promote liver health and disease awareness across the year. ***Table 2*** depicts the calendar of liver-related awareness days and events.

Sustainability in hepatology

Healthcare provision has a substantial ecological cost that contributes to the climate crisis. To make a sustainable service, gastrointestinal nurses must identify what sustainability and sustainable healthcare are. The World Health Organization (2017) defines an environmentally sustainable healthcare system as 'a health system that improves, maintains, or restores health, while minimising negative impacts on the environment and leveraging opportunities to restore and improve it, to the benefit of the health and well-being of current and future generations.'

The newly re-formed BASL Sustainable Hepatology Group is a collaboration of BASL members, working towards sustainable hepatology by reviewing the services they offer to ensure they are environmentally friendly and future proofed for a greener service. Collectively, these efforts aim to create a more environmentally sustainable healthcare system for the future.

The BASL Sustainable Hepatology Group will consider the following points highlighted in the BASL Environmental Sustainability Policy and Strategic Framework 2022 to achieve its measures:

- Education: the interaction between climate/ecological emergency and health should be incorporated into healthcare programmes
- Guidelines and position statements: when formulating guidelines and position statements, assessment of the impact on the environment should be an integral to the process
- Encourage research and innovation through promoting sustainable healthcare at our conferences
- Support strategies from other relevant organisations, such as the BSG strategy for climate change and sustainability 2021

Table 1. Local and regional liver networks

Liver network name	Contacts	Email
West of England Hepatology Liver Nurse Network	Laura Kent	laura.kent5@nhs.net
South West Hepatology Nurse Group	Katie Ramos	k.ramos@nhs.net
Southcoast Hepatology Nurse Forum	Kirsty Fancey	k.fancey@nhs.net
Thames Valley Network	Bryony Butler	bryony.butler@ouh.nhs.uk
South East Liver Nurses	Lisa Gower	lisa.gower@nhs.net
Autoimmune Nurses in North East and North Cumbria	Kathryn Houghton	kathryn.houghton1@nhs.net
North East and Yorkshire Network	Dianne Backhouse	dianne.backhouse@nhs.net
Greater Manchester and East Lancashire Liver Nurse Network	Hannah Skipper	hannah.skipper1@nhs.net
Welsh Hepatology Nurse Forum (all Wales)	Vikki Jones	victoria.e.jones@wales.nhs.uk
Midlands Hepatitis Nurse Forum	Gemma Botterill	gemma.botterill@uhb.nhs.uk
Midlands Liver Nurse Network	Isobel Hayes	isobel.hayes@uhb.nhs.uk
East of England	-	add-tr.hepatitis@nhs.net
Scottish Liver Nurses Group	Christine McTaggart	christine.mctaggart@ggc.scot.nhs.uk
Irish Hepatology Nurses Association (Republic of Ireland)	Michele Bourke	irishlivernursing@gmail.com
Northern Ireland	Leanne McWha	leanne.mcwha@setrust.hscni.net
Paediatric Liver Allied Health Professionals and Nursing Network	Jennifer Abbott	bwc.livereducationnetwork@nhs.net

- Review routine business and assess how they can be delivered virtually. Ensure that face-to-face meetings are accessible by public transport
- Ensure members have access to information on sustainable healthcare as applied to the science and practice of hepatology. Empower members to consider the impact on climate and global warming of healthcare innovations and research in liver disease.

Being part of the liver healthcare community entails working in partnership with relevant groups to expand and integrate data on climate change into the existing understanding and consensus on the condition.

The BASL Sustainable Hepatology Group are exploring the services that the BLNA can provide, and how to make them sustainable to benefit the environment while maintaining patient safety and quality research-based healthcare. The BASL Environmental Sustainability Policy and Strategic Framework 2022 is available online at www.basl.org.uk for further reading on sustainability. The following are examples of small projects for consideration:

- Building carbon footprinting into the design of services
- The use of telephone or virtual clinics compared to face-to-face clinics
- Regular medication reviews and encouraging deprescription where appropriate to tackle over prescribing and waste
- Collaborative working with hepatology trainees via Trainee Collaborative for Research and Audit in Hepatology UK (ToRcH-UK)
- Provision of elective day case paracentesis services to reduce emergency admissions with the potential of long inpatient stays
- The use of evidence-based guidance to reduce unnecessary investigations such as the

Table 2. Liver health and disease-related events for 2025

Month	Topic
January	Dry January
	Love your liver
February	Rare diseases
March	Autoimmune disease awareness
	Drug and alcohol week
April	World Liver Day
	BASL X-tra 2025
May	International Nurses' Day
	Porphyria
	European Association for Study of the Liver Conference 2025
June	Global Fatty Liver Disease
	British Society of Gastroenterology 2025
July	Haemochromatosis awareness week
	Alcohol awareness week
	World Hepatitis Day
August	British Transplant Games
September	Primary biliary cholangitis
	Organ donation week
October	Liver cancer awareness month
	Primary sclerosing cholangitis
	BASL 2025, including BLNA meeting
November	Men's health month
December	HIV awareness

Baveno VI consensus criteria in endoscopic variceal surveillance
- Submission of an abstract on sustainability to the BASL Annual Meeting.

Become a BLNA member

The BLNA supports, educates and advocates for the liver nurse community in the UK. Becoming a member of the BLNA will enable you to connect with a likeminded community, offer opportunities for education and networking, and support in developing skills and confidence in delivering excellence in clinical care.

Membership of the BLNA is £20 per annum and includes access to wider BASL resources, and reduced registrations fees for the annual meeting. Join the BLNA at www.basl.org.uk to take full advantage of membership benefits. Membership is now welcomed to band 4 colleagues providing liver care. **GN**

World Health Organization. Environmentally sustainable health systems: a strategic document. 2017. https://www.who.int/publications/i/item/environmentally-sustainable-health-systems (accessed 29 January 2025)

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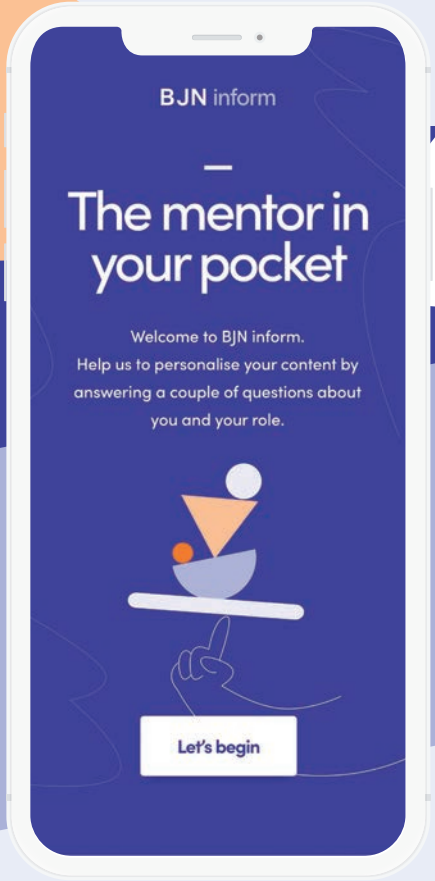

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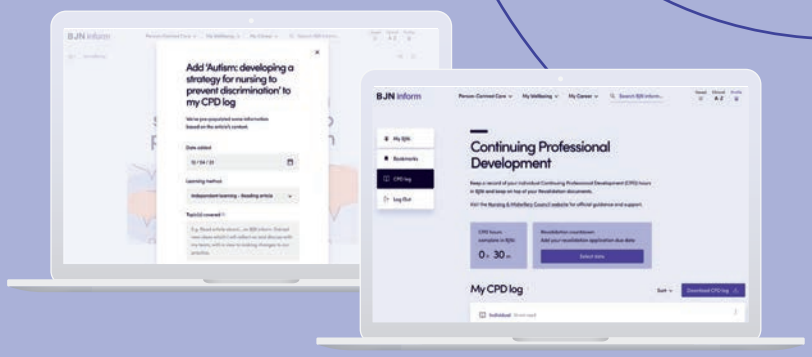

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Quality of life of patients with alcohol-associated cirrhosis

Abstract

Background: The incidence of alcohol-associated cirrhosis is increasing as a result of the ongoing rise in worldwide alcohol consumption. The current study was undertaken to assess the quality of life (QoL) of individuals with alcohol-associated cirrhosis and explore the association of this QoL measure with various clinicodemographic variables. **Methods:** A cross-sectional survey was conducted on individuals with alcohol-associated cirrhosis who visited the outpatient department of a tertiary care hospital for treatment from October to December 2023. Patients were screened for alcohol use with the Alcohol Use Disorders Identification Test (AUDIT) and QoL was measured through the Chronic Liver Disease Questionnaire. Clinicodemographic variables were also assessed. Statistics such as frequency, percentage, independent *t*-test, ANOVA and Bonferroni tests were used for data analysis. **Results:** Survey results showed that most of the participants (85.6%) had a poor quality of life; the mean score of overall QoL of the study cohort was 3.79±0.95. Analysis at QoL domain level showed that the 'worry' domain was the most impacted (mean score 2.88±0.76) followed by 'Abdominal symptoms' (mean score 3.32±1.39). QoL scores were found to be statistically significantly associated with AUDIT scores (F=14.328, *P*<0.001). Post-hoc analysis using the Bonferroni test showed that patients who were alcohol dependent had poorer QoL compared to abstainers or low-risk consumers. Also, patients who were not working because of their disease condition were found to have poor QoL compared to their working counterparts. **Conclusions:** This study suggests that most patients with alcohol-associated cirrhosis have a poor QoL. Patients who were alcohol dependent had poor QoL scores compared to abstainers or low-risk consumers of alcohol. There is a strong need for motivational enhancement, rehabilitation counselling and alcohol use disorder treatment in liver disease care settings. Healthcare professionals must make every effort to help these patients achieve complete abstinence. Approaches such as telehealth could be used by healthcare professionals for ongoing patient monitoring and motivation to make every effort in helping patients achieve complete abstinence.

Keywords

■ Alcohol-associated cirrhosis ■ Alcohol Use Disorders Identification Test ■ Health-related quality of life ■ Liver cirrhosis ■ Quality of life

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Tarika Sharma, PhD Scholar, Chitkara School of Health Sciences, Chitkara University, Punjab and Associate Professor, College of Nursing, All India Institute of Medical Sciences, New Delhi, India
tarikasharma91@gmail.com

Harmeet Kaur Kang, Professor, Chitkara School of Health Sciences, Chitkara University, Punjab, India

Shalimar, Professor, Department of Gastroenterology, All India Institute of Medical Sciences, New Delhi, India

Cirrhosis is a major source of morbidity and mortality among patients with chronic liver disease. Despite concerns about under-reporting and under-diagnosis, the overt, recorded incidence of alcohol-associated cirrhosis is increasing because of the ongoing rise in worldwide alcohol consumption (Huang et al, 2023). In 2017, a systematic analysis conducted for the Global Burden of Disease study showed that the global prevalence of alcohol-related liver disease (ALD) was around 23.6 million cases of compensated cirrhosis and 2.46 million cases of decompensated cirrhosis, (Sepanlou et al, 2020).

Studies have reported a sharp rise in alcohol use after the COVID-19 pandemic, leading to a surge in the number of hospital admissions, liver transplants, healthcare and economic costs, and deaths among patients with ALD (Aslam and Kwo, 2023). A multi-centre study conducted in India showed alcoholism as the most common cause of cirrhosis, while hepatitis B was the predominant cause of chronic liver disease (Mukherjee et al, 2017).

For patients, managing life with a compromised liver function, in addition to alcohol relapses, can be a double-edged sword (Quanbeck et al, 2014). Most of the studies on quality of life (QoL) of patients with liver disease have been conducted on mixed cohorts, with different types of cirrhosis or with viral aetiology (Fábregas et al, 2013; Gao et al, 2013). Hence, the

current study was undertaken to assess the QoL of patients specifically with an alcohol-associated cirrhosis and to investigate the association of this QoL with various clinicodemographic variables of these individuals.

Method

Study design and setting

A cross-sectional survey was conducted on patients with alcohol-associated cirrhosis visiting the outpatients department of a tertiary care hospital in the UK for treatment. Study data were collected over a period of 3 months from October to December 2023. This study is reported as per STROBE guidelines (Cuschieri, 2019).

Study participants and sampling procedure

The study population included patients diagnosed with alcohol-associated cirrhosis, aged 18 years or older, in the decompensated stage of cirrhosis, and who were willing to participate. Patients with hepatic encephalopathy, refractory ascites, sepsis, organ failure or active variceal bleeding requiring admission were excluded from recruitment. A purposive sampling method was adopted to select 90 patients meeting the sampling criteria. Purposive sampling is the intentional selection of informants based on their ability to elucidate a specific theme, concept, or phenomenon (Robinson, 2014). In this study, as patients with alcohol-associated cirrhosis were included, purposive sampling was considered appropriate. Data were collected through interviews with patients in the presence of their family members and/ or other carers to help ensure the accuracy, completeness and validity of the participants' responses. The survey was conducted in a separate room in the outpatients department for privacy and confidentiality. It took 10–15 minutes to complete the survey.

Ethical approval and consent to participate

The Institutional Ethics Committee reviewed and permitted the study (IEC-547/1.9.23, RP-41/Oct23). Written, informed consent was obtained from study participants. The consent form stated the purpose, study details and the survey length. No personal information was collected; the collected data were anonymised and stored in password-protected files to avoid unauthorised access and maintain the participants' confidentiality.

Scales of measurement

Demographic and clinical data were collected using a subject data sheet that included items such as age, sex, education, occupation, duration of diagnosis, Child-Turcotte-Pugh (CTP) score, model for end-stage liver disease (MELD) score, presenting health complaints, history of recent hospitalisation, comorbidities, harmful substance use and history of alcohol relapse etc. The CTP score is used to predict mortality in cirrhosis patients and is subclassified into A, B and C categories, in order of diminishing liver function. CTP A signifies good hepatic function, B categorises moderately impaired hepatic function and C represents advanced hepatic dysfunction (Tsoris and Marlar, 2024). The model for end stage liver disease (MELD) has proven to be a reliable predictor of short-term survival in patients with end-stage liver disease (Kim et al, 2021).

Patients were screened for alcohol use with the Alcohol Use Disorders Identification Test (AUDIT) (Saunders et al, 1993). The AUDIT has 10 questions with a range of possible scores from 0–40, where 0 indicates an abstainer who has not consumed alcohol in the past year. A score of 1 to 7 suggests a low-risk consumption, scores from 8 to 14 suggest hazardous or harmful alcohol consumption, and a score of 15 or more indicates the likelihood of alcohol dependence in such individuals.

The Chronic Liver Disease Questionnaire (CLDQ) (Younossi et al, 1999) was used to measure QoL in the study participants. The CLDQ is a standardised questionnaire that consists of 29 items (questions) to assess six separate domains of QoL in patients with liver disease: fatigue, emotional function, abdominal symptoms, systemic symptoms, worry and activity. The questions relate to symptoms or emotions experienced over the past 2 weeks and are rated on a 7-point scale ranging from 1 (all of the time) to 7 (none of the time). The overall CLDQ score represents the mean score for all six domains (Chawla et al, 2016; Chang et al, 2020). Based on reviewed literature, a CLDQ cut-off score was established for this study to be able to attribute gross high or low QoL; mean CLDQ scores ≥5 were deemed to indicate high QoL, whereas mean CLDQ scores <5 suggested low QoL (Parkash et al, 2012; Souza et al, 2015).

Statistical analysis

Collected data were coded and entered in the MS Excel sheet. Coding ensured simplification of data for analysis. The IBM SPSS version 29 was used to analyse the data. Both descriptive and inferential statistics were used in the analysis such as frequency, percentage, independent *t*-test, ANOVA and Bonferroni tests. For this investigation, a *P* value of <0.05 was considered statistically significant.

Results

All patients were male with a mean age of 43.7±8.2 years and a total of 54.5% of these were not working because of their disease condition. A history of alcohol relapse was present among 66.7% patients. Alcohol consumption as per AUDIT screening showed that

64.4% were abstainers or low-risk consumers, 14.4% were hazardous or harmful consumers and 21.2% had alcohol dependence. The clinicodemographic details for study participants are given in ***Table 1***.

Most of the patients in the study (85.6%) had a poor QoL according to the pre-determined cut off levels for high and low QoL (***Figure 1***) and the mean score of overall QoL of participants was 3.79±0.95. Analysis at the domain level of similar, grouped QoL items (***Table 2***) showed that all six domains had poor QoL scores (less than 5). The 'worry' domain was impacted most (mean score 2.88±0.76) followed by 'abdominal symptoms' (mean score 3.32±1.39).

QoL scores were statistically significantly associated with AUDIT alcohol consumption scores (F=14.328, *P*<0.001). Post-hoc analysis using the Bonferroni test also demonstrated a statistically significant relationship between abstainers or low-risk consumers and those with alcohol dependence (Mean difference:1.17) with *P*<0.001 implying that patients who were alcohol dependent had poorer QoL scores compared to abstainers or low-risk consumers. Also, participants who were not working because of their disease condition were found to have poor QoL compared to their working counterparts (***Table 3***). No statistically significant associations of QoL scores were found with: duration of illness (F=0.63, *P* value 0.59), history of alcohol relapse (*t*=0.60, *P*=0.54), comorbidity (*t*=0.61, *P*=0.55), nor history of recent hospitalisation (*t*=1.33, *P*=0.18).

Table 1. Clinicodemographic details of study participants with alcohol-associated liver cirrhosis (*n*=90)

Clinicodemographic variables		Statistical measures n (%)
Age		43.7±8.2 (Mean±SD)
Sex	Male	90 (100)
Occupation	Business	24 (26.7)
	Government job	14 (15.6)
	Private job	46 (51.1)
	Farmer/labourer	6 (6.7)
Current working status	Working	41(45.5)
	Not working	49 (54.5)
History of alcohol relapse	Yes	60 (66.7)
	No	30 (33.3)
Duration since diagnosis	<6 months	16 (17.8)
	6 months–1year	15 (16.7)
	1–3 years	29 (32.2)
	3 years	30 (51.1)
History of hospitalisation in last 3 months	Yes	47 (52.2)
	No	43 (47.8)
Presence of comorbidity	Yes	22 (24.5)
	No	68 (75.5)
Alcohol consumption as per AUDIT screening	Abstainer or low-risk consumption	58 (64.4)
	Hazardous or harmful alcohol consumption	13 (14.4)
	Alcohol dependence	19 (21.2)
Haemoglobin		10.71±2.06
WBC count		6.55±2.63
Platelets count		107.39±54.45
Bilirubin Direct Indirect		3.10±2.37 1.39±1.33 1.71±1.44
AST		79.95±56.52
ALT		54.38±27.97
Protein		7.67±1.01
PT		20.33±5.02
INR		1.59±0.45
Sodium		135.15±5.23
Potassium		4.4±0.60
Creatinine		0.74±0.14

Alanine transaminase (ALT); Aspartate transferase (AST); Alcohol use disorders identification test (AUDIT); International normalised ratio (INR); Prothrombin time (PT); White blood cell (WBC)

Discussion

Liver cirrhosis substantially contributes to mortality and morbidity worldwide. Alcohol-associated cirrhosis is a serious chronic condition associated with increased disability and premature mortality. Therefore, it is important to understand the QoL and the extent of debilitation among such patients. The present study focussed on assessment of quality of life among patients with alcohol-associated cirrhosis.

The mean age of patients in the study was 43.7±8.2 years, similar to another study by Nathiya et al (2023), which investigated frailty as a predictor of health-

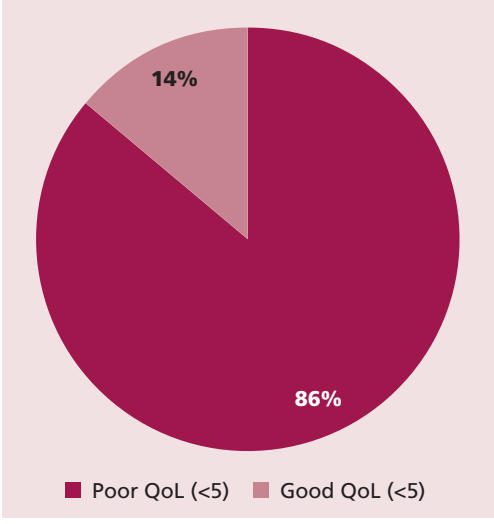

Figure 1. Quality of life (QoL) among patients with alcohol-associated liver cirrhosis.

related quality of life trajectories in patient with liver cirrhosis who had sarcopenia, where the mean age of patients was 47.42±13.47 years. Though all of the patients in this study were men, this is consistent with cohorts of other QoL liver studies (Chong et al, 2003; Souza et al, 2015; Luk et al, 2024).

The highest mean CLDQ scores by domain were for 'emotional function' (4.17±1.08), while the lowest were obtained for 'worry' (2.88±0.76), followed by 'abdominal symptoms' (3.32±1.39) domains. These findings are in line with a study by Souza et al (2015) on the assessment of health-related quality of life and other related factors in patients with chronic liver disease, where 'emotional function' showed the best CLDQ scores and 'abdominal symptoms' scored the lowest.

The current study showed a statistically significant association of QoL scores with AUDIT alcohol consumption. Patients who had higher AUDIT scores had poorer QoL. This is consistent with a study conducted by Luk et al (2024) on problematic alcohol use and its impact on liver disease quality of life (LDQoL). The authors found that problematic drinking (AUDIT score >8) was statistically significantly associated with worse LDQoL.

Table 2. Overall and domain-level analysis of quality of life of study participants with alcohol-associated liver cirrhosis (*n*=90)

Quality of life	Minimum	Maximum	Mean	SD
Overall quality of life	1.6	5.8	3.79	0.95
Abdominal symptoms	1	6.6	3.32	1.39
Fatigue	1.2	7	4.07	1.15
Systemic symptoms	1	6.2	3.58	1.10
Activity	1.3	6.3	3.4	1.16
Emotional function	1.3	6	4.17	1.08
Worry	1.2	5	2.88	0.76

Alcohol use disorders identification test (AUDIT); Standard deviation (SD)

Table 3. Association of QoL scores with AUDIT scores and current working status

Variables		Mean	SD	F/t value	P value
AUDIT Scores	Abstainer or low-risk consumption	4.11	0.92	14.328	<0.001
	Hazardous or harmful alcohol consumption	3.58	0.72		
	Alcohol dependence	2.94	0.59		
Current working status	Working	3.99	0.92	0.011	0.029

Alcohol use disorders identification test (AUDIT); Quality of life (QoL); Standard deviation (SD)

Strengths and limitations

Most of the studies on QoL in the literature focus on combined aetiologies of cirrhosis, whereas the present study included just one cause—alcohol-associated—to understand the QoL spectrum in detail in these individuals. Use of the disease-specific questionnaire (CLDQ) again adds to the strength of this study. However, this study is not free from limitations. The cross-sectional nature of this investigation, at a single point in time, does not generate data to allow conclusions about causality. Additionally, patients with CTP B or A were included from the outpatient department of just a single centre, which again limits the generalisability of the findings. The sample cohort in this study consisted of male patients only, therefore the findings cannot be applicable to female patients. Further multi-centre, longitudinal studies with large sample sizes are recommended to determine the true impact of alcohol-associated liver disease on QoL.

Conclusions

Based on the findings from this study, most patients with alcohol-associated cirrhosis appear to have a poor quality of life. Alcohol-dependent individuals particularly demonstrate a poor QoL compared to abstainers or low-risk consumers. Also, patients who are not working because of their disease condition appear to have a poor QoL compared to their working counterparts. These conclusions emphasise the need for motivational enhancement, deaddiction counselling and AUD treatment in liver disease care settings in order to improve QoL outcomes for patients with alcohol-associated cirrhosis. GN

Ethical approval: *Ethical approval was obtained from Institute Ethics Committee (Ref. No: IEC- 547/01.09.23).*

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Author contribution: *The research proposal was conceptualised by TS, HKK and SH. TS, HKK and SH established the methodology and wrote up the study. TS collected and analysed data. HKK and SH reviewed, edited and finalised the manuscript prior to publication.*

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CPD reflective questions

- Do patients with alcohol-associated liver cirrhosis experience a decline in their quality of life?
- What are the key factors contributing to the diminished quality of life in patients with alcohol-associated liver cirrhosis?
- How can nurses support patients with alcohol-associated liver cirrhosis in improving their quality of life?
- What specific interventions can healthcare professionals, particularly nurses, implement to support patients with alcohol-associated liver cirrhosis?

Key points

- Alcohol-dependent individuals tend to have a lower quality of life (QoL) compared to abstainers or low-risk consumers.
- Patients who are not working because of their disease condition appear to have a poor QoL compared to their working counterparts.
- There is a need for motivational enhancement, rehabilitation counselling and alcohol use disorder treatment in liver disease care settings to improve QoL outcomes for alcohol-associated cirrhosis patients.

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PYLERA® 140mg/125mg/125mg. PRESCRIBING INFORMATION: Please refer to Summary of Product Characteristics before prescribing. **ACTIVE INGREDIENTS:** 140mg bismuth subcitrate potassium, 125mg metronidazole, 125mg tetracycline hydrochloride. **INDICATIONS:** In combination with omeprazole, for the eradication of *Helicobacter pylori* and prevention of relapse of peptic ulcers in patients with active or a history of *H. pylori* associated ulcers. **DOSAGE and ADMINISTRATION: Adults:** One dose (3 capsules) to be taken 4 times daily, after food, for 10 days. Capsules should be swallowed whole. One omeprazole 20mg capsule/ tablet morning and evening, after food, for 10 days. Pylera and omeprazole should be taken while seated with 250mL of water. Patients should not lie down immediately after taking Pylera and omeprazole. **Older people:** Limited experience. **Children 12-18 years:** Not recommended. **CONTRAINDICATIONS:** Pregnancy, breast-feeding, paediatric populations (< 12 years), renal or hepatic impairment, hypersensitivity to the active substances, other nitroimidazole derivatives or any excipients, patients with Cockayne syndrome. **SPECIAL WARNINGS AND PRECAUTIONS:** Avoid alcohol during, and for 24 hours after treatment. Consider potassium content in patients with reduced kidney function or controlled potassium diet. Contains lactose - avoid use in patients with hereditary problems of galactose intolerance, Lapp lactose deficiency or glucose-galactose malabsorption. **Bismuth** - Rare reports of encephalopathy with excessive doses and prolonged treatment, reversible with discontinuation. May interfere with x-ray diagnostic procedures of the gastrointestinal tract. May cause temporary and harmless darkening of stools. **Metronidazole** - Very rare reports of encephalopathy. Reports of peripheral neuropathy usually when given for long periods. Reports of peripheral neuropathy with Pylera -promptly discontinue if abnormal neurologic signs appear. Administer with caution in patients with central nervous system disease. Caution in patients with evidence, or history, of blood dyscrasia. Rare cases of mild leukopenia with prolonged use. May prolong prothrombin time requiring reduced dose of oral anticoagulants (e.g. warfarin) during treatment -monitor prothrombin times. No interaction with heparin. Reports of QT prolongation when administered concomitantly with medicines with both potential for QT prolongation and potential for increased plasma levels secondary to drug-drug interactions with metronidazole. May interfere with certain serum chemistry values. **Tetracycline** - Oral candidiasis, vulvovaginitis, and pruritus ani may occur and require treatment. Overgrowth of resistant coliform organisms, such as *Pseudomonas spp.* and *Proteus spp.* may occur causing diarrhoea. Occasional reports of enterocolitis due to superinfection with resistant staphylococci and pseudomembranous colitis due to *Clostridium difficile*. Discontinue if superinfection occurs. Some observations of photosensitivity - advise patients apt to be exposed to direct sunlight or ultraviolet light of this reaction. Discontinue treatment at first evidence of skin erythema. Administer with adequate amounts of fluid, particularly bedtime dose, to reduce risk of oesophageal irritation and ulceration. Association with pseudotumor cerebri. Rarely myasthenic syndrome -care in patients with myasthenia gravis, who may be at risk of worsening. Avoid concomitant use with methoxyflurane. **Omeprazole** - May delay elimination of warfarin -a reduction of the warfarin dose may be necessary. **INTERACTIONS:** No studies with Pylera. Caution in patients on a high number of concomitant medications who are generally at higher risk of undesirable effects. **Bismuth** - Ranitidine and omeprazole enhance absorption. Take Pylera and omeprazole after food in order to reduce the absorption. **Metronidazole** - May precipitate signs of lithium toxicity -strict monitoring of lithium levels recommended. Disulfiram-like reaction with alcohol. Reported psychotic reactions in alcoholic patients using metronidazole and use of disulfiram within previous 2 weeks. Reported to potentiate anticoagulant effect of oral coumarin anticoagulants, resulting in prolongation of prothrombin time - monitor and adjust anticoagulant dose during Pylera treatment. Simultaneous administration with microsomal liver enzyme inducers (e.g. phenytoin or phenobarbital) may accelerate metronidazole elimination and reduce plasma levels. Impaired clearance of phenytoin reported. Reduces clearance of 5-fluorouracil potentially increasing 5-fluorouracil toxicity. Risk of elevated cyclosporin levels - closely monitor serum cyclosporin and serum creatinine. May increase plasma levels of busulfan leading to severe busulfan toxicity. Avoid use with compounds metabolised by CYP3A4 or CYP2C9 and prolonging the QT interval (e.g. ondansetron, amiodarone, methadone, domperidone). **Tetracycline** – Fatal renal toxicity reported with concurrent use of methoxyflurane. Decreases plasma prothrombin activity- monitor and adjust anticoagulant dose is with initiation of Pylera. Avoid use with penicillin, antacids containing aluminium, calcium or magnesium, preparations containing iron, zinc, sodium bicarbonate, or dairy products. Avoid concomitant use with retinoids due to reported increased incidence of benign intracranial hypertension. Consider discontinuing retinoid therapy during Pylera treatment. May decrease plasma atovaquone concentrations. **PREGNANCY, LACTATION AND FERTILITY**: Contraindicated during pregnancy and breastfeeding. 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