

Guiding Principals For Eligibility Criteria On Alcoholic Liver Injury In Rehabilitation Centres: A Qualitative Study In Kenya

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Abstract- AIM: United Nations Sustainable Development Goals with its 193 member states aimed to achieve reduced harmful alcohol use by year 2030. Among the key focal points were to develop alcohol care teams whose interest is to reduce acute admissions to hospitals that relate to alcohol, reduce mortality and improve on quality alcohol care. It is agreed that clinician's multidisciplinary teams should be included to integrate alcohol related treatments across all primary, secondary and tertiary health institutions. The team should formulate and coordinate alcohol related policies in their countries.

METHODS: During the in-depth interview, the voices of the participants were recorded using tape recorders. The recorded voices from indepth interviews were transcribed into verbatim using NVivo 12 software. The transcriptions were first read for familiarization and check for accuracy of the collected data. The qualitative data was grouped into different thematic, coding and indexing of similar statements was done. Emerging themes were analyzed and common statements included in the conclusion. Clearance was sort from the institutional Ethics Review Committee and the National Commission for Science and Technology.

RESULTS: Clinicians who participated narrated of applying head to toe examination to categorize a client who is mildly, moderately or severely sick for admission to the rehabilitation centres or referral to a hospital for further management. Clinician did not mention guidelines for use during admission or referral of patients. Participants queried the availability of guidelines for admission and referral of patients for alcoholic liver injury. There was a mention that even if the guidelines are available then they could be at a Ministry of Health headquarters showing their unavailability to the clinicians.

CONCLUSION: There was need to strengthen guiding principals to evaluate criteria for admission on alcoholic liver disease. There was uncertainty on the availability of structured protocols for use in rehabilitation centres in Kenya which led to clinicians apply other protocols such as head to toe examination as a criteria for assessing status of a client to justify their admission or referral incase of the very sick clients.

Index Terms- Admission, alcoholic liver injury, guiding protocols, referral, rehabilitation centre.

I. INTRODUCTION

Alcohol consumption over long duration has adverse effects to body organs. At the initial stages the effects may be asymptomatic while in adverse stages they may present with notable clinical manifestations. Majority of persons presenting with elevated liver enzymes are asymptomatic and tend to ignore the need for assessment and management of liver injury[1]. It is estimated that asymptomatic alcohol disease progression takes about 15 years; the duration that the candidates of alcoholic liver disease should be follow-up by clinicians[2]. During the asymptomatic period clinician should do a minimum of 5 tests per year for the suitable candidates [2]. If untreated and unfollowed 75% of the alcoholic liver injury patients are diagnosed late when abstinence has little value and treatment is palliative [2].

Late at the asymptomatic period, clients experience symptoms that need medical care. Upon presentation to the rehabilitation centres, clients are taken through the process of admission or referral depending on their medical status. In the United State (US) strategies have been formed such that any person suspected to be an alcohol consumer should be in close contact with clinician for continuous tests and check-ups with a focus to detection of Alcoholic Liver Injury (ALI) [2].

A study in United Kingdom (UK) by [3] reported that the number of admission due to alcohol consumption had shrunk by almost doubled in June 2020 at 28% compared to June 2019 which was at 48.5%. There were many factors that may have influenced these admissions but the researcher prediction was low figures of admission due to the fear of covid-19 in hospitals in the UK. Guided by this principal, there was prediction of low admission to rehabilitation centres in Kenya. Further there was restricted admission to the rehabilitation centres during the covid 19 pandemic.

Many governments in the world had issued restrictions on sale of alcohol on open premises encouraging take away services. [4] reported that some nations had total ban on sale of alcohol while others had categorized it as an essential commodity with restrictions. The pandemic led to increased adverse effects of alcohol with restricted admission.

A study in Argentina by [5] reported that the eligibility criteria for admission to treatment of end stage liver disease was by use of a model referred to as Child-Turcotte-Pugh (CTP) score model. The model is famous for its ability to predict mortality and as such one can remove the client from a waiting list of admission to prioritize for immediate admission. In using the model, mortality has been reduced in many centres.

Clinical guidelines for admission to rehabilitation centres

Various studies have cited guidelines on management of alcoholic liver injury patients. Such guidelines include the European Association for the Study of Liver (EASL) clinical practice guidelines. [6] mentioned that these guidelines should guide for management and evaluation of severity and prognosis for alcoholic liver injury. The use of these guidelines in all set-ups of care is encouraged since they are comprehensive and detailed.

Another set of guidelines was provided by the Asian Pacific Association for the Study of Liver (APASL), the guidelines were similar to those provided by the European association for the study of liver diseases, but [7] said that the difference between the two is that the Asian Association for the study of liver diseases advocate for liver biopsy as the best test despite its risks [7].

From Latin America there is the Latin America Association for the study of liver (ALEH) clinical guidelines. These guidelines were similar to the other two with emphasis that alcohol exclusion takes a key evaluation factor than other etiologies in their evaluation criteria. [8] A study in Chile reported that these guidelines on alcohol has been considered to have far reaching implications than any other substance on the liver [8].

[9] reported that Acute-on-Chronic Liver Failure (ACLF) is a relatively new system of approach to liver disease with a combination of hepatic and extrahepatic organ failure consideration. The study further reported that ACLF encompass the prediction for organ failure, precipitating factors, management strategies and end of life care that evolve around the liver disease. [9] in a study in America reported that the ACLF guidelines are acceptable by the Asian Pacific Association for the Study of Liver (APASL), the European Association for the Study of Liver (EASL) and the North American Consortium for the Study of End-Stage Liver Disease (NACSELD). [10] reported of instances where there could be missed opportunities of grading systems.

[9] in a study in America reported that during clinical judgement healthcare providers should incorporate the ACLF guidelines to arrive to a patient centered approach of care. The guidelines are helpful to arrive to the judgement on what treatment modality to use and when to refer the patient. [9] reported of instances where there could be missed opportunities of grading systems.

Grading system for admission criteria

[11] reported that the North American Consortium for the Study of End-Stage Liver Disease has a grading system based on the extrahepatic organ failure. Clients with two extrahepatic organ

failure were graded as grade 2 while grade three was for persons with three extrahepatic organ failure. Grade 2 extrahepatic organ failure included presence of at least two organs that among them are shock, alcohol encephalopathy, end stage renal failure and respiratory failure.

[5] in a study using the North America Consortium for the Study of End-Stage Liver Disease (NACSELD)-Acute-on-chronic Liver Failure (ACLF) score reported that more than 2 organ failures was reported as positive score predicting decompensated liver cirrhosis that was associated with morbidity and mortality. The study further reported that ACLF is considered present when there is severe acute decompensated liver disease in chronic liver disease that leads to multiple organ failure.

[12] reported that NACSELD identified the number of organ failures as the key element in prediction for hospitalization, morbidity and mortality for alcoholic end stage liver disease.

[9] reported of instances where there could be missed opportunities of grading systems.

Importance of guidelines for admission

A study in America by [9] reported on the importance of guidelines when they mentioned about the clinical judgement on admission and treatment. The researchers reported of challenges within the clinician who needed to be guided by the acceptable guidelines for patient-rehabilitation care approach.

Statement of the problem

[9] in a study in America reported of confusion among care givers on approaches used to care for liver disease patient whatever judgement is made on their care. In Kenya such confusion could be due to missed opportunities from lack of proper guidelines.

A study in Kenya by [13] did not mention on the guidelines used for admission of clients in the Country rather described the patient-centered approach of care while at the rehabilitation centre. Another study by [14] in Kenya did not report on the guiding criteria for admission at the rehabilitation centres.

A study by [15] mentioned on treatment modalities at various rehabilitation centres in Kenya but omitted the criteria used for admission, guidelines or protocols used at these centres. Therefore there are challenges among clinicians at various rehabilitation centres in Kenya on the guiding principals in admission of patients to the centres. A lack of the guidelines signifies use of other modalities which are not internationally acceptable for use in admission or referral of clients with alcoholic liver injury in Kenya.

II. METHODS

Research design

This was a descriptive cross-sectional study. Purposive sampling method was used to select the rehabilitation centres within the regions. All clinicians in the centres were involved in the sampling methods. The study was conducted in two regions within Kenya with the highest number of alcohol users; namely Uasin Gishu and Muranga Counties.

In the selection criteria, nurses with an experience of 6 months or more at the centres were included while those who were unavailable for the indepth interview were excluded.

Data collection method

In-depth interviews were conducted, the voices of the participants were recorded using tape recorders. Trained clinicians moderated during the interview sessions. The tape recorders were secured and safely stored by the researcher awaiting verbatim transcription.

Data analysis

The recorded voices from indepth interviews were transcribed into verbatim using NVivo 12 software. The transcriptions were first read for familiarization and check for accuracy of the collected data. The qualitative data was grouped into different thematics, coding and indexing of similar statements was done. Emerging themes were analyzed and common statements included in the conclusion.

III. RESULTS AND FINDINGS

A total of 15 clinicians were involved in the semi-structured interview which was conducted in the health centres. Among the participants 10 were female while 5 were male.

Guidelines for admission to rehabilitation centres

A question was asked about the availability of guidelines to evaluate alcoholic liver injury. One participants who responded reported that *"We do not have guidelines for evaluating liver disease, may be you give us one. Is there any from the ministry, I have never heard of guideline on liver disease"*. Another respondent said *"Our rehabilitation centre does not use guidelines to evaluate liver injury, but incase someone has liver disease we assess them through physical examination then we embark to start alcohol rehabilitation therapy"*.

A similar response was provided by another respondent who said that guidelines to evaluate liver disease are probably found in the ministry headquarters but at the centre they are unavailable.

Another respondent said "You said guidelines, eh eh guidelines are not here we don't have guidelines here, no no none".

The study had a question on institutional considerations for admission of Alcoholic Liver Injury clients.

Grading system for alcoholic liver injury

Participants were asked about the grading system for clients with Alcoholic Liver Injury during the admission period. One respondent reported that *"During admission we do a focused head to toe assessment for the liver, we are guided by pain scale of 1 to 10 then we divide the scale into 3, we rank the pain as mild moderate or severe to equate to mild, moderate or severe liver injury"*. The response was equated as the grading system in this institution. Another responses was by a respondents who said *"To be sincere we do not have any specific grading system, what we do here is to assess the general status of the client and if we feel the person is so sick we do not admit them here, we refer them to our referral general hospital"*. Another respondent reported that *"We do not have structured protocols for grading of our clients. Clients who are admitted to rehabilitation centres with liver problem are observed for improvement or otherwise."*

Another respondent said that *"We grade the patient general condition where some patients are graded to be taken for psychiatric treatment than alcohol rehabilitation, so the mental status assessment is done for purposes of differential diagnosis"*. A participant responded by saying that grading system for alcoholic liver injury was unavailable and requested if the researcher could introduce the grading system.

Importance of grading system during admission.

Another research question was on the importance of having a grading system for Alcoholic Liver Injury. A respondent said *"It is through grading system that we shall know when we should refer the clients or when we should retain them; for now we refer when we think it is right then when we get to the hospital there the clinicians complain to us that we refer when it is too late. I think this will help us alot"*.

There was a response from a participant who said *"Through grading we are able to know who is more sick and needs referral instead of admission because sometimes you find that we admit all clients and somehow it looks like we are guided by monitory incentive than the status of the client"*.

A respondent from the hospital set up reported said *"I feel the grading system will help those people in the rehabilitation centres who refer clients here (hospital) because we feel that they wait when it is too late that is when they refer to hospitals; why can't they refer early, so the grading system will help them do early referral rather than wait until when it is too late"*.

IV. DISCUSSION

Guidelines for admission to rehabilitation centres

Respondents who reported on the guidelines for admission did not mention relevant guidelines that guided admission of clients. Studies done on the admission and management of alcoholic liver disease mentioned that clear policies and guidelines were paramount. A study in US on global online alliance for liver studies (GOAL) by [16] mentioned that it was important to have local policies on admission and management for alcoholic liver injury [16].

[17] reported of the European Association on the Study of Liver (EASL) clinical practice guidelines that help to evaluate the severity and prognosis of liver disease across Europe and the world [17].

[8] that the Latin America Association for the study of the liver (ALEH) has provided guideline on the prevention and treatment of alcoholic liver disease. Further they have provided criteria on diagnosis and evaluation of persons in alcoholic states [8].

The researcher did not find the Africa or East Africa association on the study of liver disease and as such unavailability of guidelines on admission due to alcoholic liver injury.

According to [10] Acute-on-Chronic Liver Failure (ACLF) clinical guidelines there should be scientific evidence in grading for assessment, management and evaluation process for hospitalization of patient due to alcohol use disease.

[10] reported that incase of missed opportunities for grading system then the Acute-on-Chronic Liver Failure (ACLF) clinical guidelines are the most preferred approach to grading in assessment, management and evaluation of liver disease.

Grading for alcoholic liver injury

A study in Canada reported that persons of alcoholic liver disease should be properly examined and graded to avoid premature mortality that is untimely and unjustified [18].

Importance of grading system for admission of alcoholic liver injury clients

Some respondents said that a grading system was important since it will offer an opportunity for the care giver to know when to refer or retain clients at the centre. Another respondent mentioned about more sick clients verses fewer sick ones and refer when appropriate than too late. Another respondent mentioned about the suitability of admission criteria than admit all clients presented at the rehabilitation centres. These responses showed the need for the clinician to have a tool for admission of clients due to

alcoholic liver injury. They acknowledged that there was a gap on their practice since they lacked the guiding tool. The gap was lack of clear policies and guidelines on the management of these clients. The rehabilitation centres were at a risk of admitting all clients presented for admission without restriction because the guiding principles were not in place. When to refer or otherwise has been left to the institution to do or not to do so. It is a confusing state of ambiguity with no clear direction.

[10] reported of a grading system that involves Grading of Recommendations, Assessment, Development and Evaluation (GRADE) as a process for admission and management of alcohol use disorder clients. The study further reported that these are guidelines established for support in clinical practices for better judgement especially when clinicians are faced with challenges of comorbidities. The clinicians have to focus on the patient’s health status and arrive to the most preferred patient-centered approach of care.

Proposed checklist for evaluation of body system during admission and referral

	Organ involvement					Approach
	Liver	Kidney	Brain	Cardiovascular	Respiratory	
Alcohol use	No	No	No	No	No	Follow up in rehabilitation centre
	Yes.	No	No	No	No	Consider Admission to rehabilitation centre
	Yes	Yes	Yes	Yes	Yes	Consider Referral for admission to a hospital

KEY

Liver- ‘No’; plus ‘No’ for other organ involved---follow up at the rehabilitation centre

Liver –‘Yes’; plus ‘No’ for other organ involved---Admit at the rehabilitation centre

Liver –‘Yes’; plus ‘Yes’ for any other organ/organs involved-- Refer for hospitalization

one respondent mentioned that the lower tier institutions refer when the clients are very sick.

Africa and Kenya included has no clear protocols compared with other continents such as America, Asia or Europe who have these protocols. There are different institutions assigned responsibilities to conduct joint research to improve or evaluate the importance of these protocols, this being an important milestone missed within Africa and Kenya.

V. CONCLUSION

Clinicians offering medical services at different health facilities were not equipped with requisite protocols to guide them for admission and referral of clients with alcoholic liver injury. The clinicians tried different applications to justify the use of other tools for guidance in their performance but this was inappropriate. With such practices, clinicians are expected to miss opportunities with may otherwise have reduced morbidity and mortality on alcoholic liver disease.

Availability of proper guiding principals on the admission and referral of clients with alcoholic liver injury may offer great opportunity to the clinician in early detection and early referral thereby reducing the rate in morbidity and mortality. This would again reduce clinicians blaming one another for referral of very sick patients as experienced during the in-depth interview when

VI. RECOMMENDATIONS

1. In Kenya the continuous alcohol consumption will lead to more and more clients with alcoholic liver disease seeking admission to rehabilitation centres or other tertiary health facilities. The evaluation for suitability to admission is highly needed. The Ministry of Health in Kenya which is tasked to oversee quality care to the people of this republic should facilitate availability of proper protocols for use in rehabilitation centres.
2. The ministry should put mechanism in place to monitor the application of these protocols by all relevant service provision institutions.

3. The protocols should be adopted in various training institutional curricula to equip novice clinicians with early knowledge that will guide them in practice.
4. Clinicians should be re-educated on the guiding principals for admission and referral of clients with alcoholic liver disease.
5. Sustainability in the application of these protocols should be emphasized in all management systems at the lower tiers of health facilities to the high tiers.
6. The protocols should be designed in form of a checklist at admission and referral where the various body systems involved should be evaluated for functioning.

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