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Systematic Review

Alcohol Tolerance concerning Ageing in Addicts: A Systematic Review

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ABSTRACT:

Aim: To study the effects and tolerance of alcohol concerning ageing. Result: According to recent articles, alcohol consumption can have hazardous effects on ageing individuals, leading to a decrease in tolerance levels. Studies conducted in Norway and Australia have identified harmful drinking behaviors in young people. These studies found that early onset of drinking (EOD) and early onset of excessive drinking (EOE) during adolescence were significantly associated with an increased risk of alcohol-related problems in young adulthood, even after controlling for possible confounding variables. These findings suggest that addressing alcohol-related problems during adolescence is crucial to preventing long-lasting negative effects on individuals' health and well-being. Therefore, policies and interventions aimed at reducing alcohol-related harms should focus on targeting young people and educating them about the risks associated with hazardous drinking behaviors. By doing so, we can help prevent the negative impacts of alcohol consumption on ageing individuals and promote healthier lifestyles for all. Conclusion: Alcohol consumption can have a variety of effects on individuals, particularly as they age. Previous research has suggested that hazardous drinking behaviors can lead to numerous problems, including decreased tolerance levels. In this study, the objective was to investigate the effects and tolerance of alcohol in relation to ageing.

The findings of this study are consistent with prior research, indicating that alcohol consumption can have negative impacts on ageing individuals. Specifically, the literature suggests that hazardous drinking behaviors can persist into young adulthood and beyond, with consequences that can include decreased tolerance levels. These findings are particularly relevant for adolescents, as drinking behaviors during this stage of life can have long-lasting effects.

Furthermore, this study found that tolerance levels for alcohol decrease with age, regardless of sex or ethnicity. These findings suggest that alcohol-related problems can persist into adulthood, and that older individuals may be particularly vulnerable to the negative effects of alcohol consumption.

In conclusion, this study highlights the negative effects of alcohol consumption on ageing individuals. Hazardous drinking behaviors can lead to decreased tolerance levels, and these problems can persist into adulthood. These findings underscore the importance of addressing alcohol-related problems in individuals of all ages, particularly during adolescence and young adulthood. By understanding the effects of alcohol consumption on ageing individuals, we can better inform policies and interventions aimed at reducing alcohol-related harms.

Keywords: adolescents, alcohol, racial/ethnic, hazardous drinking, young adulthood.

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INTRODUCTION

The study explored the impact of individual alcoholrelated problems on health in young adults, specifically Black and White individuals. Drinking behaviors tend to change during the transition from adolescence to adulthood, with the teenage years being a peak time for initiation of drinking, starting at age 13. The National Institute of Alcohol Abuse and Alcoholism's recent Strategic Plan endorses a lifespan perspective for examining drinking behaviors and their consequences at different developmental stages. Alcohol consumption rates continue to rise after high school, and symptoms of alcohol abuse and dependence often appear in mid-to-late adolescence,

with 40% of individuals with alcohol use disorders experiencing their first symptoms between ages 15-19.

Using latent class analyses, the study identified gender- and racial/ethnic-specific groups of adolescent alcohol users and examined the association between alcohol use group and illicit drug use in a nationally representative US sample. Males reported diverse alcohol-related problems compared to abstainers and other alcohol-consuming groups, while females who drank heavily experienced a high risk of alcohol-related consequences. The study suggests that gender-specific adolescent alcohol and substance use prevention programs are necessary.

The study found that early onset of drinking (EOD) is associated with alcohol-related problems in adulthood. The study addressed the limitations of examining EOD, independent of early start of excessive drinking, by studying presumptive hazardous drinking in late adolescence in Norway and Australia, two countries with different drinking cultures. The study identified the drinking habits of young adults in Norway and Australia and found that EOD and early onset of excessive drinking in adolescence were significantly related to an increased risk of alcohol-related problems.

Recent studies have investigated developmental trajectories of alcohol use from early adolescence to adulthood, examining the impact of age, race, and sociodemographic correlates among White, Black, and Black-American Indian individuals. The studies found distinct alcohol trajectories among monoracial and biracial Blacks, with all groups showing a crossover or catch-up effect. Black-White adults demonstrated a cross-over effect by surpassing the alcohol drinking rates of Whites in adulthood. Monoracial Blacks were most likely to be non-drinkers in the majority. The study highlights gender, socioeconomic status, and household structure differences in the impact on alcohol use among monoracial and biracial Blacks.

OBJECTIVES

To study the effects and tolerance of alcohol in relation to ageing.

MATERIALS AND METHODS

Randomized controlled trials with interventions were included in the study.

ELIGIBILITY CRITERIA INCLUSION CRITERIA

Numerous studies were conducted between 2000 and 2019.

- Full-Text articles
- Studieswithrandomizedcontrolledtrials
- Alcoholeffects
- Effectsofalcoholon differentage groups

EXCLUSION CRITERIA

Animal studies

SEARCH STRATEGY

Published results related to the alcohol consumption of people which includes original articles andresearch papers in databases. Many pieces were used to study for the data and to give the informationbased on facts. These sites were used for the study of the most important points. The sites were pubmed, and different articles were used for the references. These four articles were used to get moreinformation related to alcohol, along with alcohol effects associated with different ages and races hasbeen showninit.

RESULT

According to recent articles, alcohol consumption can have hazardous effects on ageing individuals, leading to a decrease in tolerance levels. Studies conducted in Norway and Australia have identified harmful drinking behaviors in young people. These studies found that early onset of drinking (EOD) and early of excessive onset drinking (EOE) during adolescence were significantly associated with an increased risk of alcohol-related problems in young adulthood, even after controlling for possible confounding variables. These findings suggest that addressing alcohol-related problems adolescence is crucial to preventing long-lasting negative effects on individuals' health and wellbeing. Therefore, policies and interventions aimed at reducing alcohol-related harms should focus on targeting young people and educating them about the risks associated with hazardous drinking behaviors. By doing so, we can help prevent the negative impacts of alcohol consumption on ageing individuals and promote healthier lifestyles for all.

Fig1 flow diagram showing the no of studies identified, screened, assessed for eligibility, excluded and included in this systematic review.

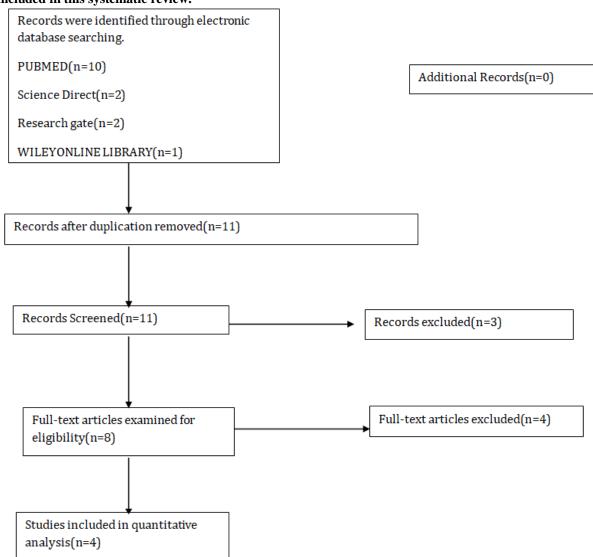


Table1: Characteristics Of Intervention In This Study.

Table1: Characteristics of Intervention in This Study.						
Author name	Year	Sample size	Duration	Interventions		
Maria R Khan, Charles M Cleand, Joy D	2014	16737	Oneyear	Test Group whites (n = 9548), African Americans		
Scheidell, Amanda TBerger				(n = 4005) and Hispanic $(n = 3184)$ participants		
Froydis Enstad, Tracy Evans-Whipp, Anne	2019	1115	Oneyear	Test Group Nor we gian $(n = 329)$ Australian $(n = 786)$		
Kjeldsen, John W Toumbourou,						
Tilmannvon Soest						
Trenette T Clark, Maya Corneille,	2013	15278	Oneyear	Test Group Monoracial and biracial N=15,278		
Emanuel Coman						
Karen G Chartier, Michie N Hessel brock,	2011	166	Sixmonth	Test Group N=166 ages of 23 and 29 (M = 25.89,		
Victor M Hessel brock			S	SD=1.53F=60)		

Table 2: Characteristics Of Outcome And Effective Measures

Author name	Year	Effective measure	Results	
Maria R Khan Charles M Cleand,	2014	latent class analyses(LCAs)	Level of alcohol use and reportedproblems	
Joy D Scheidell, Amanda TBerger			associated with use washigher in the white versus	
			minoritypopulation. Classification of	
			anydrinkingclass wasastrongriskfactor	
			For adolescents and adults.	
Froydis Enstad, Tracy Evans-	2019	modified Poissonregression	Both EOD and EOE in adolescencewere found to	

Whipp, Anne Kjeldsen, John W		approachAlcohol Use	be significantly related toan increased risk of
Toumbourou, Tilmannvon Soest		DisordersIdentification	alcohol-related problems in young adulthood.
		Test(AUDIT).	
Trenette T Clark,	2013	A study of adolescent and	Heterogeneity is observed regarding
Maya Corneille, Emanuel Coman		young adult health	Alcohol trajectories between monoracial
			monoracial and biracial/ethnic Blacks.
Karen G Chartier, Michie NHessel	2011	Semi-structured Assessment	Males, compared to females, reported ahigher
brock, Victor MHessel brock		for the Genetics of	prevalence of most alcoholproblems and showed
		Alcoholism(SSAGA-I).	greater alcoholproblemseverity.

Table 3: Characteristics of Bias In Different Studies Taken For Review

Author name	Random sequence	Allocation	Blinding of	Incomplete	Selective bias	Other bias
	generation	concealment	outcome	outcome		
Maria R khan	-	-	+	+	-	+
TrenetteT Clark	-	-	-	?	+	-
KarenG Chartier	+	?	-	+	-	?
Frøydis Enstad	?	+	-	-	+	+

DISCUSSION

Researchers discovered racial/ethnic variations in the prevalence of alcohol usage. The developmentof alcohol use among Black teenagers and how it differs from that of adolescents from otherracial/ethnic groups are, however, less well-known also know even less about the developmentaltrajectories of alcohol use among multiracial people because the majority of research has been onmonoracial/ethnic groups. The study is one of the first to characterize patterns and sociodemographic correlates of alcohol consumption among White, Black, Black-American Indian, Black-Hispanic, and Black-White youth from early adolescence through adulthood. We discovered that alcohol use riseswith age for all monoracial, monoracial, and biracial groups, consistent with other research (Substance Abuse and Mental Health Services Administration [SAMHSA]2011). The results of thisstudy add to prior research by highlighting the manner in which particular racial, biracial, andmonoracial groups' alcohol consumption patterns change over time. Our results concurred with those of Other researchers who have looked at patterns of substance use among Blacks and discovered that while Black adolescents' rates of substance use were lower than those of White teenagers, Blackadults' rates of substance usage exceeded those of White adults by young adulthood (Geronimus, Neidert& Bound 1993; Kandel et al. 2011). The catch-up or cross-over effect is the name given tothis occurrence by Geronimus & associates (1993). We also discovered that only Black-White adultsconsumed more alcohol than White adults in adulthood, with all other groups coming close but notcoming close to Whites' rates. Contrary to popular belief, Black-American Indians were therace/ethnic group most likely to not drink during the study period. Up to age 25, youth and earlyadulthood. Despite these drawbacks, these findings emphasize the significance of taking racial/ethnicvariability into account, particularly in relation to the beginning and of substance useamong progression biracial

populations. Our results indicate the need for additional research and raise severalsignificant questions about the epidemiology and aetiology of substance use among monoracial andmultiracial Blacks. Finding the risk and protective variables behind these variations in alcoholtrajectories is a crucial next step. Future research could also investigate racial/ethnic group heterogeneity by looking at teenage drugus etrajectory category heterogeneity and potential predictors of trajectory category membership. Taking into account the racial/ethnic disparities discovered in this study and conclusions, Further research is necessary to better understand this demographic, which should help researchers and practitioners tailor interventions.

Multiracial people have a higher chance of engaging in harmful behaviours.

CONCLUSION

Alcohol consumption can have a variety of effects on individuals, particularly as they age. Previous research has suggested that hazardous drinking behaviors can lead to numerous problems, including decreased tolerance levels. In this study, the objective was to investigate the effects and tolerance of alcohol in relation to ageing.

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REFERENCES

- Wiemann CM, Berenson AB, San Miguel VV. Tobacco, alcohol and illicit drug use among pregnant women. Age and racial/ethnic differences. J Reprod Med. 1994 Oct;39(10):769-76.
- Chartier KG, Hessel brock MN, Hessel brock VM. Alcohol problems in young adultstransitioning from adolescence to adulthood: The association with race and Gender. AddictBehav.2011 Mar;36(3):167-74.
- Zemore SE, Mulia N, Jones-Webb RJ, Liu H, Schmidt L. The 2008-2009 recession and alcohol outcomes: differential exposure and vulnerability for Black and Latino populations. JStud Alcohol Drugs.2013 Jan;74(1):9-20.
- Clark TT, Corneille M, Coman E. Developmental trajectories of alcohol use among monoracial monoracial and biracial Black adolescents and adults.J Psychoactive Drugs.2013 Jul-Aug;45(3):249-57.
- Khan MR, Clel and CM, Scheidell JD, Berger AT. Gender and racial/ ethnic differences in patterns of adolescent alcohol use and associations with adolescent and adult illicit drug use. Am J Drug Alcohol Abuse. 2014 May;40(3):213-24.
- Klima T, Skinner ML, Haggerty KP, Crutchfield RD, Catalano RF. Exploring heavy drinking patterns among black and white young adults. J Stud Alcohol

- Drugs.2014 Sep;75(5):839-49.
- Jones-Webb R, Karriker-Jaffe KJ, Zemore SE, Mulia N. Effects of Economic Disruptions on Alcohol Use and Problems: Why Do African Americans Fare Worse? J Stud Alcohol Drugs. 2016 Mar; 77(2):261-71.
- Miller PG, Butler E, Richardson B, Staiger PK, Youssef GJ, Macdonald JA, Sanson A, Edwards B, Olsson CA. Relationships between problematic alcohol consumption and delinquent behaviour from adolescence to young adulthood. Drug Alcohol Rev. 2016May;35(3):317-25.
- 9. Lee CK, Corte C, Stein KF. Drinker Identity: Key Risk Factor for Adolescent Alcohol Use. JSchHealth.2018Mar;88(3):253-260.
- Enstad F, Evans-Whipp T, Kjeldsen A, Toumbourou JW, von Soest T. Predicting hazardousdrinking in late adolescence/young adulthood from early and excessive adolescent drinking -a longitudinal cross-national study of Norwegian and Australian adolescents.BMC PublicHealth. 2019 Jun 21;19(1):790.
- Byrnes HF, Miller BA, Bourdeau B, Johnson MB. Impact of Group Cohesion AmongDrinking Groups at Nightclubs on Risk From Alcohol and Other Drug Use.J Drug Issues.2019 Oct; 49(4):668-679.
- Goings TC, Hidalgo ST, McGovern P, Ennett S. Alcohol trajectories among biracial blacksubgroups: Testing the intermediate substance use hypothesis. Addict Behav.2020Feb;101:106006.
- Rossow I, Moan IS, Bye EK. Declining Trend in Adolescent Alcohol Use: Does It Have Any Significance for Drinking Behaviour in Young Adulthood? Int J Environ Res Public Health. 2022 Jun 27;19(13):7887.
- 14. Szulc, Michał & Kujawski, Radosław & Pacholak, Amanda & Poprawska, Marta & Czora-Poczwardowska, Kamila&Geppert, Bogna& Mikolajczak, Przemyslaw. (2023). Cannabidiol as a Modulator of the Development of Alcohol Tolerance in Rats. Nutrients. 15. 1702. 10.3390/nu15071702.
- 15. McGrew, Shelby & Raines, Amanda & Viana, Andres & Vujanovic, Anka. (2023). Posttraumatic stress and alcohol use among Hispanic/Latina survivors of interpersonal trauma: Associations with anxiety sensitivity and distress tolerance. Psychological trauma: theory, research, practice and policy. 10.1037/tra0001453.