

<https://doi.org/10.48047/AFJBS.6.14.2024.3462-3475>



African Journal of Biological Sciences

Journal homepage: <http://www.afjbs.com>



Research Paper

Open Access

Investigating Drug Dependency Attitudes and Practices: Perspectives Among Adult Population in Abha, Saudi Arabia

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Volume 6, Issue 14, Aug 2024

Received: 09 June 2024

Accepted: 19 July 2024

Published: 08 Aug 2024

doi: [10.48047/AFJBS.6.14.2024.3462-3475](https://doi.org/10.48047/AFJBS.6.14.2024.3462-3475)

Abstract

Introduction: Adults are the target group for drug dependence research because of their rising rate of substance abuse, complex social and environmental influences, and significant impact on public health and societal well-being, making understanding and addressing their drug-related issues crucial for intervention and policy development. The objective of this study was to examine the Attitudes and Practices of Drug Dependence Among Adults in Abha City. **Methods:** This study used a cross-sectional design, with 643 adults chosen using a convenience sample method from Saudi Arabia's Abha city. Demographic variables of adults, substance abuse attitude survey, and practices of drug use survey. The variables were measured using a questionnaire. Information was gathered using the Google Forms survey, which was collected from August through October 2023. Data were analyzed using t-tests and chi-square tests. **Results:** There was a significant difference in the mean attitude and practice scores of male and female adults ($p < .001$); however, there was no correlation ($r = 0.025$) between the attitude and practice scores of drug use among adults ($p < 0.05$). Age, gender, marital status, and educational status of adults were associated with attitude and practice scores ($p < 0.05$). Adult family type was associated with attitude scores ($p < 0.05$), whereas it was not associated with practice scores ($p > 0.05$). The area of residence of the adults was not associated with attitude scores ($p > 0.05$) but was associated with practice scores ($p < 0.05$).

Conclusion: A complex relationship exists between adults' attitudes and behaviors concerning drug use. Demographics, such as age, sex, marital status, and education, were found to be significant for attitudes. Therefore, factors other than attitude, such as peer pressure or personal experiences, are likely to influence drug use more. Moreover, family background seems to affect attitudes, not necessarily behaviors. Lastly, while residence does not have anything to do with attitudes, it has something to do with drug-use practices. Overall, this research highlights the necessity for a multi-faceted approach in terms of understanding, and perhaps preventing drug abuse. However, much demographic matter and family background may be important; relying on attitudes alone can be inadequate. It may be beneficial to comprehend how an individual's environment and social circles influence them.

Keywords: Attitude, behaviors, Adults, Drug dependence, Practices.

Introduction

Drug addiction is a multifaceted circumstance faced by individuals globally, with different rates of dependency in various regions (Ali et al., 2011). One must not forget that drugs are addictive, and their abuse is a disease that can cause severe medical problems just as other chronic illnesses (Balkhi, 2021). For instance, the problem of drug smuggling and regional conflicts may lead to high rates of drug seizures in some areas, such as Saudi Arabia, when it comes to amphetamines (Al-Haddad, 2003). Furthermore, research has demonstrated that drug addiction involves associative learning processes and alterations in brain circuitry, chiefly located within the nucleus accumbens and the extended amygdala. These changes result in compulsive drug-seeking behavior motivated by the powerful rewarding properties of drugs. In addition, altered neurobiological bases for addiction entail permanent molecular and structural changes within the dopamine reinforcement system in the brain, resulting in the transformation of controlled drug use into compulsive intake (Althobaiti, 2022).

Recent studies have explored various aspects of substance use disorders in Saudi Arabia to understand the prevalence and patterns of drug abuse. Saquib et al., (2020) recognized the need for further research in this area, especially highlighting substances such as *Catha edulis*. Furthermore, Amir (2001) compared such aspects of substance abuse trends between Saudi Arabia and the UAE using factors such as age at first drug use, type of drug used, number of years addicted to drugs, and employment status. These studies also inform the reader of how norms in society are affected by religious values, which is an important avenue through which one can study patterns of drug dependency. Similarly, Ibrahim et al., (2022) found that it was necessary for the government to discourage people from abusing such substances so that they could not face the negative consequences of their actions. However, these socio-cultural changes have brought about new trends and leisure activities, including drug abuse. Moreover, Saquib, et al., (2020) provided insights into how common substance use disorder is among Saudi patients in addiction treatment settings, mentioning amphetamines, cannabis, alcohol, and heroin as some of the commonly abused drugs.

Drug addiction is highly prevalent in Saudi Arabia (Althobaiti et al., 2022). This has resulted in several negative outcomes, such as higher rates of hepatitis, HIV infections, criminal activities, and socioeconomic deterioration. Knowledge of the level of drug addiction and its consequences is essential for the development of effective public health policies and interventions

to address drug abuse in the area. Furthermore, Ibrahim et al., (2022) emphasized the need for government-led efforts to minimize substance abuse, as well as its undesirable impacts on individuals and society. The changing social dynamics in Saudi Arabia have resulted in new trends for leisure, including drug abuse, which need to be addressed through proactive measures.

Although previous research has provided valuable insights, it also has limitations. For instance (Ibrahim et al., 2022) highlighted the lack of focus on preventive measures while stating that “There is little emphasis on prevention and a great dependence on repression as a means of combating drug addiction”. Moreover, Saquib, et al., (2020) documented amphetamines, cannabis, alcohol, and heroin abuse, among others, in Saudi Arabia. However, there is a need to know more about the prevalence and specific patterns of use in various groups. Knowledge about the distribution of drug addiction in different areas of Saudi Arabia remains limited despite the presence of evidence that shows high levels of addiction in the country (Althobaiti et al., 2022). This gap hinders the formulation of effective healthcare approaches for addressing this problem. In addition, new social dynamics have been noted, who introduced new risk factors that necessitate proactive steps against them (Ibrahim et al., 2022).

The existing literature highlights the necessity of wide-ranging research into the prevalence, patterns, and causes of drug dependence among Saudi people. This study aimed to fill this gap by investigating adults’ attitudes and practices related to drug addiction in Abha City. Thus, by considering prevalence, risk factors, and sociocultural implications, it will be possible for researchers to develop targeted interventions, public health campaigns, and/or policy initiatives aimed at reducing dependency and enhancing overall well-being. Hence, this study aimed to investigate the Attitudes and Practices of Drug Dependence Among Adults in Abha.

Materials and Methods

Design

This study used a cross-sectional approach to investigate the Attitudes and Practices of Drug Dependence Among Adults in Abha.

Participants/Setting

To expand the sample size, the researchers utilized a convenience sampling technique using Google Forms and social media. The study included adult native Arabic speakers residing in Abha City, Saudi Arabia, who were literate only in reading and writing skills, irrespective of gender. A total of six hundred and forty-three adults participated in this study. Inclusion criteria meant that

participants were willing to participate between eighteen years and 40 years of age. An online sample calculator for Rao software was used to determine sample size. With a 50% response distribution, the standard deviation would be set at a value that would give a $\pm 5\%$ margin of error, which would discover a 95 percent confidence interval. This calculation resulted in the recommended sample size of 643 participants.

Data-Gathering Procedure

Data were gathered by the researchers using a Google Forms survey. The participants completed the survey. Anonymity was preserved in all the participants. Participation in the study was voluntary and anonymous. The participants were asked to complete the questionnaire. Confidentiality was maintained, and informed consent was obtained from all subjects involved in the study. Data were collected between August and October 2023.

Questionnaires

Participants completed a brief demographic questionnaire and the following instruments. This research utilized two questionnaires. The tool was prepared in English, translated into Arabic, and back translated into English. The two versions were compared until no significant differences were observed.

Substance Abuse Attitude Survey (SASS).

The substance abuse attitude survey (SASS) consisted of 20 items and was used to assess the attitudes and beliefs related to substance abuse and addiction. This includes five domains: Permissiveness (3-15), Treatment Intervention (6-30), non-stereotypes (6-30) Treatment optimism (5-25), and non-moralism (5-25). Respondents will provide their attitudes and beliefs related to substance abuse and addiction. Responses were recorded on a 5-point Likert-type scale ranging from 5 (strongly agree) to 1 (strongly disagree). The total scores ranged from 25 to 125.

Practices of drug use survey

The 20-item self-report instrument measures the Practices of Drug Use Survey.

Data Analysis

Statistical analysis of the variables was performed using the SPSS Statistical Software version 24. Data were summarized using the average (standard deviation). Descriptive statistics were used to present the participants' sociodemographic characteristics. The chi-squared test was used to identify any associations between the two categorical variables.

Results

Table 1: Frequency And Percentage Distribution of Background Characteristics Among Adults (N=643)

Background Characteristics	f	%
Age in years		
≥30 years	398	61.9
<30 years	245	38.1
Gender		
Male	376	58.5
Female	267	41.5
Marital status		
Married	269	41.8
Single	374	58.2
Type of Family		
Nuclear	637	99.1
Joint	6	0.9
Area of Residence		
Village	507	78.8
City	136	21.2
Education		
Non literate	2	0.3
Primary	4	0.6
High School	46	7.2
University	591	91.9

Mean age- 30 years

Table 1 on background variables reveals that the majority of adults were aged >30 years (61.9%), of which approximately half were male (58.5%) and unmarried (58.2%). Most were from the nuclear family (99.1%). Regarding their residence, 78.8% were from the village, and 91.9% of them had university-level education.

Table 2 Descriptive Statistics of Attitude towards Drug Abuse among Adults (N=643)

Components	Obtainable Score		Obtained Score		Mean	Mean %	SD
	Min	Max	Min	Max			
Permissiveness	3	15	5	14	9.58	63.8	1.887
Treatment Intervention	6	30	11	27	20.48	68.2	2.554

Non-stereotypes	6	30	10	30	20.86	69.5	2.973
Treatment optimism	5	25	12	22	18.27	73.08	2.360
Non-moralism	5	25	12	25	19.35	77.4	2.536
Global Score	25	125	60	109	88.53	70.82	8.760

Table 2 reveals that the highest percentage of the mean scores was observed in non-moralism (77.4%) and the lowest mean percentage was observed in permissiveness (63.8%) of attitude towards Drug Abuse among adults.

The total mean score for Drug Abuse in adults was (33.3%) with a mean value of 6.66 ± 7.213 .

Table 3. Comparison of Mean and Standard Deviation of Attitude and Practice Scores between the Male and Female group of Adults (N=643)

Scores	Male (n=376)		Female (n=267)		Difference b/w means	Independent “t” value	p Value
	Mean	SD	Mean	SD			
Attitude	87.56	8.637	6.11	7.028	-2.348	3.376	.001
Practice	89.91	8.762	7.44	7.410	-1.333	2.317	.021

Table 3 indicates that there was a significant difference in the mean attitude and practice scores of male and female adults ($p < .001$).

There was no correlation ($r = 0.025$) between the attitude and practice scores for drug use among adults ($p < 0.05$).

Tab 4. Association between Demographic Variables and Attitude and Practice scores of Drug Use among Adults (One Way ANOVA) (N= 643)

Variables	n	Attitude		Practice	
		Mean	SD	Mean	SD
Age in Years					
≤ 30	398	88.00	8.527	6.21	6.727
>30	245	89.40	9.075	7.40	7.899
F & P value		F=3.928	p=.048	F=4.204	p=.041
Gender	376	87.56	8.637	6.11	7.028

Male					
Female	267	89.91	8.762	7.44	7.410
F & P value		F=11.399	p=.001	F=5.367	p=.021
Marital status					
Married	269	88.48	9.513	7.80	7.737
Single	374	88.57	8.187	5.84	6.704
F & P value		F=.017	p=.895	F=11.677	p=.001
Type of Family					
Nuclear	637	88.60	8.752	6.71	7.231
Joint	6	81.67	7.230	2.00	1.789
F & P value		F=3.738	p=.054	F=2.537	p=.112
Area of Residence Village					
Village	507	88.36	8.482	7.08	7.463
City	136	89.20	9.728	5.10	5.961
F & P value		F=.994	p=.319	F=8.231	p=.004
Education					
Non literate	2	82.00	.000	15.00	.000
Primary	4	78.50	21.362	7.50	5.196
High School	46	85.26	7.316	10.35	6.492
University	591	88.88	8.678	6.34	7.202
F & P value		F=4.643	p=.003	F=5.410	p=.001

Table 4 reveals that age, gender, marital status, and educational status of adults were associated with attitude and practice scores ($p < 0.05$). Adult family type was associated with attitude scores ($p < 0.05$), whereas it was not associated with practice scores ($p > 0.05$). The area of residence of adults was not associated with attitude scores ($p > 0.05$), whereas it was associated with practice scores ($p < 0.05$).

Discussion

The purpose of this study was to investigate the attitudes and practices of drug dependence among adults. The study has shown varying attitudes of adults towards drug abuse. Most

respondents were likely to agree that drug abuse is not a moral shortcoming but a health challenge, as well as to be optimistic about treatment and to oppose stereotypes about drug users. Fewer agreements were reached regarding the effectiveness of the interventions. According to research by Alimohammadi et al., (2021) lifestyle was found to be predictive of overall health, highlighting the significance of addressing a range of lifestyle characteristics, such as physical activity and health, to enhance well-being and prevent drug misuse. A comprehensive strategy is crucial for preventing drug usage, as (Hajargasht et al., 2019) emphasized the knowledge, health, safety, cognitive, and religious components of the issue. Assertiveness, psychological toughness, and emotional regulation all have an impact on attitudes toward drug addiction. Kazemi et al., (2019) highlighted how these traits can predict addictive behavior. However, unfavorable attitudes toward drug usage have increased because of community-based treatments. According to a survey conducted among teenagers in Jambi City, an indifferent attitude towards drug usage indicates the necessity for high schools to implement preventive measures (Ridha et al., 2021).

Interestingly, there was a significant difference between attitude and practice among the participants; however, there was no correlation between attitude and practice scores for drug use in adults. The fact that many adults have different attitudes and behaviors concerning drug use has been examined by several researchers. However, the relationship between these two may not necessarily be clear because attitudes toward drugs may differ from actual behavior. According to earlier research findings, young people's drug use behavior may be influenced by family dynamics, religiosity, and discussions on Christian conduct according to earlier research findings (Ray et al., 2001). On the other hand, when considering church attendance or religious doctrine discussions, compared to discussions about Christian living standards within the family setting, it was found that the connection between family religiosity and drug use behavior was stronger. Subsequently, scientific investigations have shown that family support can play a role in self-control abilities among hypertensive cases (Arini, 2023). Family support has been found to help people cope with their health problems better, facilitating the adoption of healthier habits. Furthermore, expanded treatments for youth weight management programs using interventions based on the Family Systems Theory (FST), which explores individual behaviors and addresses family dynamics. Moreover, Walters and Noon (2018) studied delinquency and externalizing behaviors among adolescents; however, factors such as childhood animal cruelty and subsequent delinquent behaviors were found to be dependent on the externalizing correlates of family context (Frank et

al., 2008). Similarly, the authors examined how school atmosphere could mediate the relationship between social support aggression and substance abuse among learners, concluding with some important information regarding these variables as they relate to shaping behaviors (Walters and Noon 2018). While there may be a significant difference between attitudes towards drug use among adults and their actual practices, this correlation is influenced by a complex multiplicity of factors involved, such as family dynamics, religiosity, family support, and family atmosphere. Hence, it is crucial to recognize the intricate interplay between these variables to develop effective interventions that can reduce drug use behaviors and promote healthier outcomes for individuals.

Demographic factors related to adults' attitudes and practices towards drug use have been well-researched. For instance, age, gender, marital status, and education are all known as variables related to attitude and practice scores on drug use among adults (Shaghghi et al., 2020). In addition, the type of family structure is linked with the attitude score, while the area of residence is associated with that of practice (Goni et al., 2019). Research has also found that attitudes affect various behaviors, such as pharmacists' intention to report adverse drug events (Gavaza et al., 2011). Intentionality Attitude has been seen as a significant predictor of engagement in particular behaviors, which underscores its vital role in influencing actions. In addition, the Theory of Planned Behavior has been employed to study psycho-social determinants over time about drugs among adolescents, which emphasizes the evolution of attitudes towards drugs (Nur et al., 2017). Likewise, surveys have examined healthcare workers' knowledge, beliefs, and practices regarding certain health behaviors such as influenza vaccination (Chen et al., 2022). The Knowledge Attitudes and Practices (KAP) theory model has played a major role in helping to understand the decision-making process underlying health behavior and predicting behavior change among high-risk groups. Similarly, research has examined how perceived firm sustainability practices influence staff members and organizational performance, thereby revealing how attitudes lead to organizational outcomes (Choi and Yu 2014). This shows that there is a complicated interplay between demographic factors on the one hand and people's attitudes, as well as their acts towards drug usage by grown-ups. Understanding the effect of attitude on behavior and interaction between different demographic variables can provide useful information for planning targeted interventions aimed at improving healthy practices and attitudes toward drug use.

Implications to Behavior Management

The findings provide possible directions for future studies that could provide greater potential preventive effects than we currently anticipate. The findings suggest that conducting motivational interviews and cognitive behavioral therapy (CBT) are two behavior management strategies that change attitudes toward drug use and promote hope for recovery. They provide useful coping mechanisms for handling stress, triggers, and cravings.

Relapse prevention techniques assist in recognizing and avoiding high-risk circumstances to sustain long-term sobriety. The inclusion of social support networks in the rehabilitation process provides accountability and motivation for long-term healing. These methods treat substance abuse in conjunction with co-occurring mental health issues. With a focus on long-term maintenance, they encourage long-lasting lifestyle adjustments and guard against relapses.

The integration of social support networks, including family therapy, support groups, and peer support programs, is a common component of behavior-management therapies. These networks provide people with the support, responsibility, and sense of community essential for long-term recovery. Co-occurring mental health conditions, including depression, anxiety, and trauma, affect a large number of people who suffer from drug addiction. To provide a more thorough and all-encompassing approach to recovery, behavior management techniques attempt to address these underlying problems in addition to substance abuse treatment.

Study Limitations

There are some limitations to this study, which looks at the connections between drug dependence, attitudes, and practices in adults. Its segmented nature makes it difficult to prove causation because it cannot tell us whether drug dependency influences changes in attitudes or practices or vice versa. When evaluating attitudes and behaviors, self-reported assessments may include biases and recall problems. Accuracy may be improved by objective measurements such as biological markers or observational data. As the research was conducted in a particular place with a specific population, cultural and socioeconomic differences may prevent the findings from being broadly applicable. To improve representativeness, probability sampling approaches and diverse populations should be incorporated into future studies. Studies that have longitudinal access to data may be able to clarify how attitudes and behaviors have changed over time and how they affect drug dependency,

providing insights into the causal relationship. Despite these limitations, this study offers insightful information about the relationship between adult drug dependence, attitudes, and practices.

Conclusion

There is a complex relationship between adults' attitudes and behaviors regarding drug use. Demographics, such as age, sex, marital status, and education, were found to be significant for attitudes. Therefore, factors other than attitude, such as peer pressure or personal experiences, are likely to influence drug use more. Moreover, family background seems to affect attitudes, not necessarily behaviors. Lastly, while residence does not have anything to do with attitudes, it has something to do with drug-use practices. Overall, this research highlights the necessity for a multi-faceted approach in terms of understanding, and perhaps preventing, drug abuse. However, much demographic matter, as well as family background, may be important; relying on attitudes alone can be inadequate. It may be beneficial to comprehend how an individual's environment and social circles influence them.

Conflicts of interest

None

Declarations Ethics approval and consent to participate. Ethical approval was granted by the Research Ethics Committee (ECM#2024–1304) of King Khalid University, dated June 9, 2024. The research team confirmed that all methods were performed in accordance with relevant guidelines and regulations. Informed consent was obtained from all subjects.

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