Chapter 7

Applications to Northern Cyprus Prime Ministry's Anti-Drug Commission: Insights and Recommendations for Fighting Substance Use and Addiction

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Abstract

This chapter evaluates applications made to the Northern Cyprus Prime Ministry's Anti-Drug Commission (ADC) from 2021 to 2022 and gathers insights into the difficulties in fighting drug use and addiction. Anonymised data containing details about substance use and demographic information were analysed using quantitative techniques. The results showed that a higher percentage of male applicants are from the 25–39 age group, indicating that young male adults are not only particularly vulnerable but also more likely to seek help for substance abuse. The examination of the education level indicates that educational institutions play a crucial role in drug prevention. Finally, this chapter focuses on the recommendations. It suggests that the implementation of tailored intervention programs, enhancements in data collection methods, and improvements in policy development can effectively address substance abuse. By following these recommendations, Northern Cyprus can achieve more successful outcomes in combating drug addiction.

Keywords: Substance abuse, addiction, intervention strategies, entropy weight, odds ratio

7.1. Introduction

This study investigates the applicants who submitted applications to the Northern Cyprus Prime Ministry Anti-Drug Commission (ADC) between 2021 and 2022. The objective of this analysis is to develop a more profound comprehension of the challenges encountered in the fight against substance use and addiction, as well as to contribute to the identification of effective strategies to overcome these obstacles.

7.2. Literature Review

Substance use and its associated disorders are complex phenomena with significant public health implications. Research in this area spans various dimensions, including genetic predispositions, behavioural patterns, and the impact on mental health and violence. This synthesis aims to consolidate key insights from multiple studies to provide a comprehensive understanding of substance use analysis.

Adolescents exhibit distinct patterns of substance use, often involving alcohol, cannabis, and tobacco. Lower socioeconomic status, older age, and male gender are predictors of higher substance use (Halladay et al., 2020).

The choice of data aggregation and modelling significantly affects the outcomes of substance use studies, highlighting the need for optimal statistical approaches to improve prediction and intervention strategies. Substance use disorders are chronic, relapsing conditions that are difficult to predict accurately in the general population, small subgroups, or individual patients. This limits resource allocation, treatment outcome identification, and patient intervention. Four articles in the American Journal of Drug and Alcohol Abuse suggest statistical approaches to improve the current state of the art. These approaches include handling raw data, extracting maximum information, and using optimal models for evaluating substance use outcomes. The results of statistical analysis are sensitive to data aggregation and modelling,

emphasising the importance of using the best possible statistical approaches (Gorelick & McPherson, 2015).

Implicit cognition is a reliable predictor of substance use, with the largest effect sizes found in studies assessing semantic associations and word association measures. A meta-analysis of 89 effect sizes from 19930 participants estimated the link between substance-related implicit cognitions and legal and illegal drug usage. A weighted average effect size of 0,31 was found. Moderation analysis showed considerable effect size variability by implicit cognition, measurement approach, sample makeup, and substance type. Studies on marijuana usage, implicit semantic linkages, and word association measures had the biggest effect sizes. Implicit cognition predicts substance use; however, impact sizes vary due to methodological considerations (Rooke et al., 2008).

Forming implementation intentions is effective in reducing alcohol and tobacco use, although the effect sizes are small. The meta-analysis of 21 papers found that implementation intention interventions effectively decrease substance use, specifically alcohol consumption and tobacco smoking. However, the impact of these interventions is limited. The studies were conducted among the general population and secondary and higher education students. No studies were found on the effect of implementation intentions on illicit drug use (Malaguti et al., 2020).

7.3. Methodology

The analysis was conducted under two headings: demographic variable analysis, which utilized variables such as gender and age, and substance use analysis, which utilized variables such as the individual's first choice of substance and the most recent time they used narcotics or alcohol. Quantitative research methods have also been employed: entropy weight, coefficient of variation, the chi-square test, and odds ratio.

7.3.1. Research Aim and Questions

The research aims to better understand the nature of ADC applicants in order to improve the effectiveness of interventions and resource allocation by ADC. To this aim following research questions are searched.

i. RQ 1: What are the demographic characteristics of the ADC applicants?

ii. RQ 2: What is years effect on the demographic characteristics of the ADC applicants?

iii. RQ 3: What are the substance types used by the ADC applicants?

iv. RQ 4: What is years effect on the substance used by the ADC applicants?

7.3.2. Data Collection Procedure

The study was unable to access microdata sets containing essential variables for the analyses done. The analyses were performed using the dataset derived from the 2021 and 2022 ADC's reports and the tables in the 2022 Statistical Yearbook of the Northern Cyprus Statistical Institute. The Commission, as previously described, creates the ADC report and formally hands over the application data to the author for academic use.

7.3.3. Analysis of Data

The data analysis was conducted using the statistical analysis programs Excel and Jamovi. A range of statistical tests, such as entropy weight, coefficient of variation, the chi-square test, and odds ratio, were utilized to investigate demographic factors and substance use.

In order to avoid problems arising from using different scales between variables and having different numbers of observations in each year being compared, percentage values were used. Subsequently, the entropy weights were computed for the levels of variables, and the coefficient of variation was

calculated from the entropy weights to facilitate comparisons between variables—the preliminary examination of variables employed this coefficient of variation. Subsequently, 2x2 tables were generated for the components that were deemed significant. The chi-square test was employed to evaluate the impact of years, and the odds ratio calculation was employed to interpret the effects that were found to be significant.

7.3.4. Ethical Considerations

The research project was committed to safeguarding the confidentiality and anonymity of the participants. Without fail, the researchers ensured that all data underwent thorough anonymization, leaving no identifiable information. This section elucidates the research methodology and the data analysis process in great detail, enabling readers to comprehend the study's procedures and assess the validity of the results.

7.4. Findings

The analyses were conducted as described in the methodology section, and the obtained results are presented below (see table 7.1.).

7.4.1. Demographic Analysis

The number of people applying to ADC was 292 in 2021. In 2022, this number decreased by 171 people to 121 people. Due to this difference, rates were used rather than frequency values to obtain more accurate results when comparing years.

The entropy weighting method, which is widely used in multi-criteria decision-making techniques, was employed to investigate the changes in demographic variables between 2021 and 2022 and for variables. The coefficients of variation derived from the entropy weight were employed to compare them. Demographic variables exhibited coefficients of variation ranging from 114% to 140%.

Table 7.1. Frequency tables of demographic variables by years

Individual-Level Variables	**Frequency (N)**		**Percentage (%)**	
	2021	**2022**	**2021**	**2022**
Gender				
Female	29	17	9,9	14,0
Male	263	104	90,1	86,0
Age				
15 - 19	13	2	4,5	1,7
20 - 24	49	30	16,8	24,8
25 - 29	81	31	27,7	25,6
30 - 34	56	23	19,2	19,0
35 - 39	38	15	13,0	12,4
40 - 44	25	7	8,6	5,8
45 - 49	12	5	4,1	4,1
50 - 54	2	2	0,7	1,7
55 - 59	9	3	3,1	2,5
60 - 64	6	2	2,1	1,7
65 - 69	1	1	0,3	0,8
Level of education				
University graduate	65	39	22,3	32,2
High school graduate	99	41	33,9	33,9
Secondary school graduate	62	24	21,2	19,8
Primary school graduate	59	12	20,2	9,9
Illiterate	7	5	2,4	4,1
Nationality				
Northern Cyprus	259	116	88,7	95,9
Foreigner	33	5	11,3	4,1
Marital status				
Single	184	90	63,0	74,4
Married	81	21	27,7	17,4
Separated	7	2	2,4	1,7
Divorced	17	5	5,8	4,1
Widow	3	3	1,0	2,5
Having children				
Yes	73	29	25,0	24,0
No	219	92	75,0	76,0
Total	**292**	**121**		

7.4.1.1. Gender Distribution

The coefficient of variation for the gender variable was the third highest among the six variables, with 136%. This was because the rate of women in the data set increased by approximately 40% from 9,9% in 2021 to 14,0% in 2022. In the 2022 statistical yearbook published by the Northern Cyprus Statistical Institute, the rate of men was stated as 54,5% and the rate of women as 45.5%. This shows that although there has been a 40% increase in the rate of women applying to ADC, the rate of men (90,1% in 2021 and 86% in 2022) is much higher than it is in the society. When this situation was examined with the Chi-square test, it was found that gender ($p < ,001$) had a significant effect on ADC applicants. In addition, the finding of the Odds ratio of 5,03 shows that men are approximately five times more likely to apply to ADC than women.

7.4.1.2. Age Group

Among the six variables, the age variable exhibited the second-greatest coefficient of variation at 139%. The primary cause of this is the age categories of 15-19, 50-54, and 65-69. The percentage of individuals aged 15-19 decreased by approximately 63% from 4,5% in 2021 to 1,7% in 2022. The percentage of individuals aged 50 to 54 increased by approximately 140% from 0,7% in 2021 to 1,7% in 2022. A comparable scenario was observed in the 65-69 age bracket. The percentage of individuals aged 65-69 increased by approximately 140% from 0,3% in 2021 to 0,8% in 2022. The graph below compares the age-wise distribution of the population in the 2022 statistical yearbook published by the Northern Cyprus Statistical Institute and the age-wise distribution of ADC applicants.

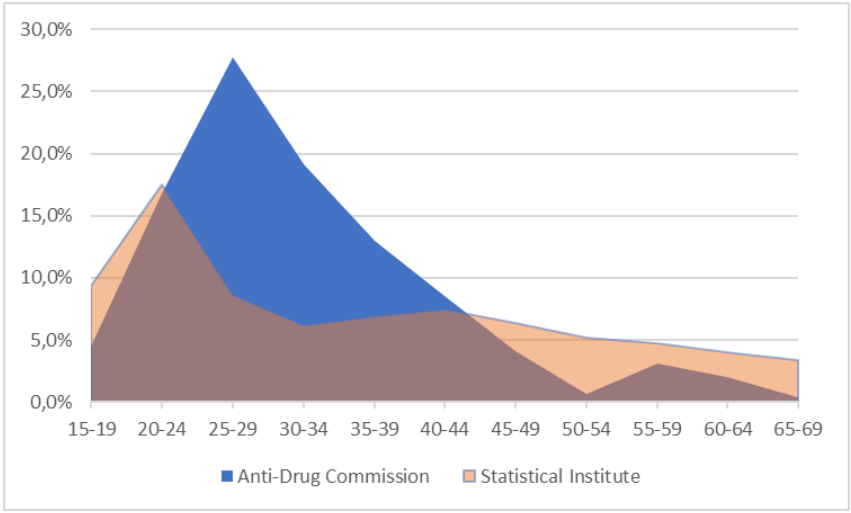

Figure 7.1. Age-wise distribution

The proportion of individuals in the 25-39 age group who apply to ADC is significantly higher than that of this age group in society, as illustrated in the figure 7.1. The Chi-square test revealed that age group ($p < ,001$) significantly impacted the number of applicants to ADC. Additionally, the Odds ratio of 4 indicates that the likelihood of individuals in the 25-39 age group enrolling in ADC is approximately four times greater than that of other age groups.

7.4.1.3. Education Level

The education level variable exhibited the lowest coefficient of variation among the six variables, measuring at 114%. This resulted from the fact that the percentage of individuals with high school and secondary school education, which accounted for over 50% of the data set, remained nearly constant between 2021 and 2022. Nevertheless, the literacy rate rose by 70% to 4,1%, and the proportion of university graduates, 22,3% in 2021, increased by approximately 50% to 32,2%. The percentage of primary school graduates decreased by 50% during this time, reaching 9,9%.

7.4.1.4. Nationality

The nationality variable exhibited the maximum coefficient of variation among the six variables, measuring 140%. This resulted in a more than 60% decrease in the proportion of immigrants in the data set, from 11,3% in 2021 to 4,1% in 2022. During the same period, the percentage of Northern Cyprus citizens rose by 8%, from 88,7% to 95,9%.

7.4.1.5. Marital Status

The variable associated with marital status had the third lowest coefficient of variation among the six variables, measuring 120%. This is because the proportion of individuals who are single, which accounts for over 60% of the data set, has only fluctuated by 18%. The most significant changes in this variable during the transition from 2021 to 2022 were the decrease in the proportion of married individuals from 27,7% to 17,4%, which represented a 37% change, and the increase in the proportion of unmarried individuals from 63% to 74,4%, which represented an 18% change. The proportion of divorced individuals decreased from 5,8% to 4,1%, a 29% change, and the proportion of separated individuals decreased from 2,4% to 1,7% in the wake of these changes. The proportion of widows was the only one to increase among the marital status divisions, except for singles. The percentage of widows increased by 150%, from 1% to 2,5%.

7.4.1.6. Having Children

Out of the six variables, the coefficient of variation for the variable associated with having children was the second lowest at 115%. This resulted from the percentage of individuals with children increased from 25% to 24%, while the percentage of individuals without children increased almost entirely from 75% to 76%.

7.4.2. Substance Use Analysis

The analysis of substance uses and its impact on individuals applying to ADC is conducted using ten categories outlined in table 7.2.

Table 7.2. Categories to be examined regarding substance use and its effects

First Preferred Substance Type
When was the last time you used drugs or alcohol?
Have you ever used drugs intravenously?
Is there anyone in your family who is addicted to alcohol or uses drugs?
What is the prevalence of drug or alcohol use among your friends?
Does Your Environment Have Easy Access to Substances or Is It Predominantly Inhabited by Substance Users?
How much do withdrawal symptoms affect your life?
Do You Have Difficulties While Under the Influence of Substances?
Have you ever inflicted harm on yourself?
Do you have any prior experience with quitting alcohol or drugs?

The coefficients of variation were employed to compare these categories. The variables related to individuals' substance use and impacts had coefficients of variance ranging from 25% to 164%.

7.4.2.1. First Preferred Substance Type

Table 7.3. displays the percentages of the preferred chemical type among applicants to ADC in 2021 and 2022. The variable had a coefficient of variation of 161%, which was the highest among the ten variables.

The primary factors contributing to this variation are outlined in a sequential manner. The utilization of Amphetamine Derivatives as the primary option witnessed a significant surge of over 600%, rising from 0,6% in 2021 to 4,6% in 2022. The prevalence of Ecstasy as the primary preference experienced a complete decline of 100%, dropping from 3,2% in 2021 to 0,0% in 2022. The prevalence of Alcohol as the primary preference surged by 72%,

rising from 9,1% in 2021 to 15,6% in 2022. Furthermore, the prevalence of Synthetic Cannabinoids declined by over 50%, dropping from 29,2% to 14,7%. Similarly, the occurrence of Heroin was reduced by more than 50%, declining from 1,9% to 0,9%. In both years, Marijuana was overwhelmingly preferred by nearly half of the population. Alcohol and synthetic cannabinoids succeeded in Marijuana. During this period, there has been a significant rise in alcohol consumption and a notable decline in the use of synthetic cannabinoids.

Table 7.3. Percentage table of first preferred substance type by years

Individual-Level Variables	**Percentage (%)**	
	2021	**2022**
Marijuana	48,1	54,1
Alcohol	9,1	15,6
Synthetic Cannabinoids	29,2	14,7
Cocaine	6,5	4,6
Amphetamine Derivatives	0,6	4,6
Other (LSD, GHB)	0,0	2,8
Heroin	1,9	0,9
Crack	0,0	0,9
Volatile Substances	0,6	0,9
Pills Like Akinetum, Xanax	0,6	0,9
Ecstasy	3,2	0,0
Pills Like Rohypnol and Rivotril	0,0	0,0

Upon examining the impact of time on these three substances, it is observed that there is a significant influence when analysing the preference for Marijuana as the primary substance of choice using the Chi-square test ($p = ,007$). Furthermore, the discovery of an Odds ratio of 1,27 indicates a 27% rise in the proportion of individuals who preferentially use Marijuana compared to non-users from 2021 to 2022.

When analysing the impact of years on the preference for Alcohol as the primary substance using the Chi-square test ($p < ,001$), a statistically significant effect is shown. Furthermore, the discovery of an Odds ratio of 1,85 indicates that the proportion of individuals who prefer Alcohol as their

primary option compared to non-users has risen by 85% between 2021 and 2022.

Upon doing a Chi-square test (p< ,001) to analyse the impact of years on the preference of Synthetic Cannabinoids as the primary substance of choice, a statistically significant effect was observed. Furthermore, the discovery of an Odds ratio of 0,42 indicates a 58% decline in the proportion of individuals who preferentially use Synthetic Cannabinoids compared to those who do not, from 2021 to 2022.

7.4.2.2. When Was the Last Time You Used Drugs or Alcohol?

The percentages for the last time individuals who applied to the ADC used substances or Alcohol in 2021 and 2022 are presented in Table 7.4. The coefficient of variation for this variable was the second highest among ten variables, with a value of 146%.

Table 7.4. Percentage table of most recent occurrence of drug or alcohol use by years

Individual-Level Variables	**Percentage (%)**	
	2021	**2022**
At Most 1 Day Ago	7,1	16,7
2-3 Days Ago	4,5	7,4
4-7 Days Ago	2,6	2,8
8-15 Days Ago	1,3	6,5
16-30 Days Ago	4,5	6,5
At Least 30 Days Ago	79,9	60,2

The main reasons for this variation are presented in order. The rate of those who used Alcohol or substances at least 30 days ago decreased by 25% from 79,9% in 2021 to 60,2% in 2022. The rate of those who used Alcohol or substances at most one day ago increased by 133% from 7,1% in 2021 to 16,7% in 2022.

The effect of years on these two items (“the last alcohol or substance use being at least 30 days” and “the last alcohol or substance use being at most 1 day”) was examined, and the obtained results are presented below.

When the effect of years on the last alcohol or substance use being at least 30 days was examined with the Chi-square test (p< ,001), a significant effect was found. In addition, the finding of the Odds ratio of 0.38 shows that the rate of those who used Alcohol or substances at least 30 days ago to those who used Alcohol or substances in a shorter period decreased by 62% from 2021 to 2022.

When the effect of years on the last alcohol or substance use being at most 1 day was examined with the Chi-square test (p< ,001), a significant effect was found. In addition, the finding of the Odds ratio of 2.62 shows that the ratio of those who used Alcohol or substances on the last day to those who used Alcohol or substances for a more extended period increased by 162% from 2021 to 2022.

7.4.2.3. Have You Ever Used Drugs Intravenously?

In Table 7.5, the percentages for 2021 and 2022 regarding the use of intravenous substances by applicants to ADC are presented. This variable exhibited the third most significant coefficient of variation among the ten variables, with a value of 141%.

Table 7.5. Percentage table of using at least once drug intravenously by years

Individual-Level Variables	**Percentage (%)**	
	2021	**2022**
Never	93,4	97,2
At Least Once	6,6	2,8

The main reason for this variation is the 58% decrease in the rate of people who have used drugs at least once by intravenous means, from 6,6% in 2021 to 2,8% in 2022. When the effect of years on the rate of using drugs at least once by intravenous means was examined with the Chi-square test (p< ,001), a significant effect was found. In addition, the finding of the Odds

ratio of 2,45 shows that the rate of those who have not used drugs at least once by intravenous means to those who have used drugs increased by 145% from 2021 to 2022.

7.4.2.4. Is There Anyone in Your Family Who Is Addicted to Alcohol or Uses Drugs?

The percentages for 2021 and 2022 regarding whether there is any alcohol or substance addiction in the families of people applying to ADC are presented in Table 7.6. The coefficient of variation for this variable was 117%, making it the fourth highest variable among ten variables.

Table 7.6. Percentage table of anyone in her/his family who is addicted to alcohol or uses drugs by years

Individual-Level Variables	**Percentage (%)**	
	2021	**2022**
No	74,2	69,2
My Mother/Father	10,6	12,0
My Brother	4,6	5,1
My 2nd Degree Relative	10,6	13,7

The main reason for this variation is the 29% increase in the rate of those with second-degree relatives who are alcohol or substance addicts, from 10,6% in 2021 to 13,7% in 2022. When the effect of years on having second-degree relatives with alcohol or substance addiction was examined with the Chi-square test (p = ,034), a significant effect was found. In addition, the Odds ratio of 1,34 shows that the rate of having second-degree relatives with alcohol or substance addiction increased by 34% from 2021 to 2022.

7.4.2.5. What Is the Prevalence of Drug or Alcohol Use Among Your Friends?

The percentages for 2021 and 2022 regarding whether substance or alcohol use is common among friends of people applying to ADC are presented

in Table 7.7. The coefficient of variation for this variable was 102%, making it the fifth lowest variable among ten variables.

Table 7.7. Percentage table of prevalence of drug or alcohol use among her/his friends by years

Individual-Level Variables	Percentage (%)	
	2021	2022
None	26,4	27,2
Minimal	23,0	20,4
Half	12,8	15,5
Majority	17,6	15,5
Almost All	20,3	21,4

The main reason for this variation is the 21% increase in the rate of those who use drugs or alcohol with half of their friends, from 12,8% in 2021 to 15,5% in 2022. In addition, the rate of those who use drugs or Alcohol with very few to most of their friends decreased by approximately 10% in 2021 and 2022. When the effect of years on the rate of those who use drugs or Alcohol with half of their friends was examined with the Chi-square test ($p = ,083$), no insignificant effect was found.

7.4.2.6. Does Your Environment Have Easy Access to Substances or Is It Predominantly Inhabited by Substance Users?

Table 7.8 presents the percentages for 2021 and 2022 that indicate if the environment where individuals applying to ADC reside is conducive to substance use or if the majority of residents use substances. The coefficient of variation for this variable was the second lowest among the ten variables, at 72%.

Table 7.8. Percentage table of her/his environment have easy access to substances or is it predominantly inhabited by substance users by years

Individual-Level Variables	Percentage (%)	
	2021	2022
No	46,6	51,5
Partially	15,8	18,4
Yes	37,7	30,1

The main reason for this variation is the 20% decrease in the rate of those who stated that their living environment is where substances are easily found or where most people use substances, from 37,7% in 2021 to 30,1% in 2022, when the effect of years on whether the living environment is a place where substances are easily found or where most people living there use substances was examined with the Chi-square test ($p< ,001$), a significant effect was found. In addition, the finding of the odds ratio of 0,71 shows that the probability of the living environment being a place where substances are easily found or where most people living there use substances to the probability of not being a place decreased by 29% from 2021 to 2022.

7.4.2.7. How Much Do Withdrawal Symptoms Affect Your Life?

Table 7.9 presents the percentages for 2021 and 2022 regarding how much the withdrawal symptoms experienced by people who applied to ADC affected their lives. The coefficient of variation for this variable was the third lowest among the ten variables, at 90%.

Table 7.9. Percentage table of withdrawal symptoms affect her/his life by years

Individual-Level Variables	Percentage (%)	
	2021	2022
None	69,2	64,0
Mild	10,1	11,4
Moderate	9,4	10,5
Noticeable	11,3	14,0

The main reason for this variation is that the effect of the withdrawal symptoms experienced by individuals on their lives increases by 10% to 25% at different levels. When the Chi-square test was used to examine whether the withdrawal symptoms experienced by individuals affect their lives at any level, a significant effect was found (p = ,014). In addition, the Odds ratio of 1,26 shows that the probability of the withdrawal symptoms experienced by individuals affecting their lives at any level compared to the probability of not affecting them increased by 26% from 2021 to 2022.

7.4.2.8. Do You Have Difficulties While Under the Influence of Substances?

Table 7.10 presents the percentages for 2021 and 2022 regarding level of experiencing problems during the time period when they were under the influence of the substance by people applying to ADC affected their lives. This variable had a coefficient of variation of 105%, making it the fifth highest among the ten.

Table 7.10. Percentage table of having difficulties while under the influence of substances by years

Individual-Level Variables	**Percentage (%)**	
	2021	**2022**
Never	54,5	55,6
Rarely	18,2	11,1
Sometimes	8,4	11,1
Most Often	11,0	10,2
Almost Always	7,8	12,0

The main reason for this variation is that the rate of people who rarely experience problems while under the influence of substances decreased by 39% from 18,2% in 2021 to 11,1% in 2022. In addition, the rate of people who almost always experience problems increased by 54% and the rate of people who sometimes experience problems increased by 32% during this period. When the Chi-Square test was used to examine whether the years

affected people's never/low-level with high-level problems while under the influence of substances at any level (p = ,060), no significant effect was found.

7.4.2.9. Have You Ever Inflicted Harm on Yourself?

Table 7.11 presents the percentages for 2021 and 2022 regarding whether applicants to ADC have ever harmed themselves. This variable had a coefficient of variation of 93%, making it the fourth-lowest variable among the ten.

Table 7.11. Percentage table of having ever inflicted harm on herself/himself by years

Individual-Level Variables	**Percentage (%)**	
	2021	**2022**
Never	74,8	76,6
1-2 Times	15,9	10,3
More than 2 Times	9,3	13,1

The main reason for this variation is that from 2021 to 2022, the rate of people who harmed themselves 1-2 times decreased by 35%, while the rate of people who harmed themselves more than twice increased by 41%. When the effect of years on this change was examined with the Chi-square test (p< ,001), a significant effect was found. In addition, the Odds ratio of 2,17 shows that the ratio of people who harmed themselves more than twice to people who harmed themselves 1-2 times increased by 117% from 2021 to 2022.

7.4.2.10. Do You Have Any Prior Experience with Quitting Alcohol or Drugs?

Table 7.12 presents the percentages of people applying to ADC regarding their attempts to quit Alcohol or drugs for the years 2021 and 2022. The coefficient of variation for this variable was the lowest among the ten variables, at 25%.

The main reason for this variation is that the rate of people who have attempted to quit Alcohol or drugs at least once from 2021 to 2022 has decreased by 30%, while the rate of people who have never attempted to quit Alcohol or drugs has increased by 55%. When the effect of years on this change was examined with the Chi-square test ($p < .001$), a significant effect was found. In addition, the Odds ratio of 2.21 shows that the ratio of people who have never attempted to quit Alcohol or drugs to people who have at least once attempted to quit Alcohol or drugs has increased by 121% from 2021 to 2022.

Table 7.12. Percentage table of having prior experience with quitting alcohol or drugs by years

Individual-Level Variables	**Percentage (%)**	
	2021	**2022**
Never	35,3	54,7
1 Time	31,4	21,9
2 Times	33,3	23,4

7.5. Conclusion

Applications are impacted by ADC's emergency response plans and resource allocation. There are many applications concerning specific substances, highlighting the need for specialised interventions and resources. Furthermore, the many applications without specific information underscore the importance of implementing anonymous support services and launching information campaigns (Roush et al., 2015). These insights enable ADC to develop and implement more focused and effective strategies and campaigns for addressing substance use and addiction. Incorporating healthcare providers' support and strategies can enhance the efficiency of ADC, leading to faster and more successful outcomes in combating substance addiction (Cao et al., 2011; Rao et al., 2017). By partnering with healthcare providers and implementing their strategies and assistance, ADC can improve its efficacy, thereby attaining faster and more powerful results in combating substance addiction (Clark, 2002; Marinelli-Casey et al., 2002; Yatsco et al., 2020).

Applicant statistics and substance analysis provide a valuable resource for continuously improving ADC's strategies, playing a critical role in enhancing current services and developing new strategies and interventions to adapt to society's changing needs. Continuous data analysis and monitoring are critical components in the development of strategic decisions that will lead to more favourable outcomes in the fight against substance abuse and addiction.

The study results demonstrate the diverse nature of drug use in Northern Cyprus, considering variables such as gender, age, education level, and nationality. The data reveals that from 2021 to 2022, drug use was more prevalent among young adults and males. The substances identified include marijuana, synthetic cannabinoids and Alcohol. These findings not only indicate that young adults and males are more susceptible to drug use, but they also raise questions about the impact of education on drug use, suggesting that the issue extends beyond specific social or economic groups. These findings emphasise the need to consider demographic factors when developing prevention and combat strategies against drug use (Swendsen et al., 2009). This study (Sprague Martinez et al., 2020) emphasises the importance of community engagement and educational programs in addressing substance abuse and addiction. These activities are critical for reaching different parts of society and providing them with the knowledge they need to prevent substance use emergencies. Participating in informational and instructional activities is essential for effectively dealing with growing demands about substance use and addiction (Best et al., 2013). The analysis emphasises the critical role of community engagement and education in effectively addressing the rising needs associated with substance use and addiction. This will ensure that ADC's services and treatments are able to meet these issues effectively.

Special intervention programs focused on young adults and males and the inclusion of educational institutions in preventive education and awareness programs (Drake et al., 2008) are critical. According to probation data, the program is primarily used by men.

Intervention Programs and Educational Institutions

- Develop special intervention programs for young adults and males.
- Educational institutions should organise informative programs to explain the negative impact of substance use (Huestis et al., 2017).

Research and Data Collection

- Employ more objective data collection methods with larger sample groups.
- A detailed examination of factors affecting drug use can help develop intervention strategies.
- It is crucial to regularly monitor and modify ADC's techniques using data-driven methods in order to effectively tackle substance usage and addiction (McKay et al., 2009). An extensive analysis of the gathered data is essential for improving emergency response protocols (Pichini et al., 2016), allocating resources, adopting preventive measures, and developing awareness campaigns (Ladis et al., 2018).

Policy and Program Development

- The Northern Cyprus government and relevant institutions should use these findings in policy and program development.
- Effective strategies for combating drug use should be formulated.

Public Awareness

- Raise awareness of drug use and addiction across all segments of society.
- The media, civil society organisations, and educators should play a significant role.

Probation Processes

- Increase the probation program's accessibility and develop unique support mechanisms for women.
- Assess the program's monthly participation distribution and implement special measures during the year-end period.

Implementing these recommendations can help achieve more effective outcomes in the battle between drug use and addiction. Continuous data analysis and monitoring will enable the refinement of interventions and strategies over time, leading to a more successful fight against drug addiction.

7.6. Challenges and Limitations of the Study

Since the relevant microdata could not be accessed in the analyses conducted in this study, ADC's 2021 and 2022 reports and the Northern Cyprus Statistical Institute's 2022 Statistical Yearbook were used. Due to using a summary table instead of microdata, detailed and comparative analyses between variables could not be made.

7.7. Acknowledgment

Tables of Report of Northern Cyprus Prime Ministry’s Office of Anti-Drug Commission, which are developed by the aforementioned Commission, are officially provided to the author for academic use. The author would like to thank to Northern Cyprus Prime Ministry’s Office of Anti-Drug Commission.

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