

Knowledge, Attitudes, and Patient Perspectives on Drug Allergy Among Adults with Suspected Drug Hypersensitivity

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ABSTRACT

Objective: Drug allergy labels are common in clinical practice; however, misconceptions, insufficient knowledge, and inadequate management may negatively affect patient safety and healthcare utilization. Data regarding patient knowledge, attitudes, and perspectives on drug allergy remain limited, particularly among adults with suspected drug hypersensitivity.

Materials and Methods: In this cross-sectional survey study, 189 adult patients referred to a tertiary Allergy and Immunology outpatient clinic for suspected drug allergy between September and November 2025 were enrolled. Data were collected using a structured questionnaire assessing demographics, knowledge regarding drug allergy, attitudes toward drug allergy, and patient perspectives on drug allergy management. Knowledge scores ranged from 0-10, and attitude scores were calculated using a 5-point Likert scale. Associations between demographic and clinical variables and questionnaire outcomes were analyzed using non-parametric tests, correlation analyses, and multivariable linear regression.

Results: The median age of the participants was 40 years, and 59.6% were female. The median knowledge score was 8/10, with 9.0% of participants answering all knowledge questions correctly. Higher educational attainment was significantly associated with better knowledge scores ($p<0.001$), whereas increasing age was negatively correlated with knowledge level ($\rho=-0.244$, $p<0.001$). Knowledge and attitude scores showed a weak positive correlation ($\rho=0.169$, $p=0.020$). Only 18.0% of participants reported written confirmation of their drug allergy diagnosis, and 27.5% had received written information regarding safe alternative medications. Although 78.3% expressed willingness to undergo drug provocation testing, 16.4% reported rarely or never disclosing their drug allergy history during healthcare visits.

Conclusion: Adults with suspected drug hypersensitivity demonstrated generally favorable knowledge and attitudes regarding drug allergy; however, substantial gaps remain in documentation, communication, and patient-centered management practices. These findings highlight the need for improved education, standardized documentation, and broader implementation of specialist-guided drug allergy evaluation to optimize long-term patient safety.

Keywords: Drug allergy, drug hypersensitivity, patient knowledge, patient attitudes, cross-sectional study

INTRODUCTION

Drug allergies and adverse drug reactions are an increasingly important health concern and may lead to potentially preventable life-threatening reactions, particularly in patients with known drug allergies (1). Most adverse drug reactions are predictable, dose-dependent type A

reactions related to the pharmacological properties of the drug. In contrast, drug hypersensitivity reactions (DHRs) are unpredictable, dose-independent type B reactions that account for approximately 6-10% of all adverse drug reactions (2). Drug hypersensitivity reactions may present with a broad clinical spectrum, ranging from immediate reactions (occurring within 1-6 hours after drug intake),

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such as urticaria, angioedema, or anaphylaxis, to delayed reactions (occurring >6 hour after drug intake), including maculopapular eruptions, severe cutaneous adverse reactions (such as SJS/TEN, DRESS, and AGEP), single-organ reactions (such as drug-induced liver injury and autoimmune hemolytic anemia), and drug-specific hypersensitivity syndromes (3).

Numerous studies have investigated the epidemiology of drug hypersensitivity reactions; however, in many cases, distinctions between immediate and delayed reactions, as well as reaction subtypes, have not been clearly established. Moreover, diagnoses are often made in emergency settings without subsequent confirmation by an allergist. Consequently, the real-world incidence and clinical characteristics of drug hypersensitivity reactions remain incompletely defined (1). When patients are referred to an allergy specialist, they often interpret their drug allergy based on personal experiences and existing knowledge, shaping their healthcare-related decisions accordingly. Knowledge and attitudes regarding drug allergy may influence healthcare utilization, costs, and morbidity through unnecessary drug avoidance or inappropriate medication use. In this context, the aim of the present study was to evaluate the level of knowledge regarding drug hypersensitivity reactions among patients with a history of DHR and to identify potential determinants that may contribute to the management of drug hypersensitivity reactions

MATERIAL and METHODS

Patients with a history of drug allergy who were referred to the Immunology and Allergy outpatient clinic of Adana City Training and Research Hospital were included in the study. This study was conducted between September 30, 2025 and November 15, 2025 among adult patients evaluated for suspected drug allergy at a tertiary care center. A total of 189 participants were enrolled. All participants were aged ≥ 18 years and provided written informed consent prior to participation.

The questionnaire was developed by physicians specialized in Allergy and Immunology based on the current literature. Data were collected using a structured questionnaire consisting of four sections: demographic characteristics, knowledge regarding drug allergy, attitudes toward drug allergy, and practices related to drug allergy management. The demographic section included questions on age, sex, and educational level.

The knowledge section consisted of 10 questions assessing participants' knowledge regarding drug allergy. Each question was coded as 1 for a correct answer and 0 for an incorrect answer, and the total knowledge score was calculated on a scale ranging from 0 to 10. The attitude section consisted of four statements evaluated using a 5-point Likert scale ranging from "strongly disagree" to "strongly agree." Total and mean attitude scores were calculated, with higher scores indicating more positive attitudes.

The practice section comprised four questions assessing real-life behaviors related to drug allergy management. This section evaluated prior confirmation of the diagnosis, disclosure of drug allergy history to healthcare professionals, willingness to undergo drug provocation testing, and receipt of written information regarding safe alternative medications. The questionnaire was administered to patients with a history of drug allergy who were presenting to an allergy center for the first time. The questionnaire was completed on the day of the patient's visit to the allergy clinic, as the patient had previously experienced a drug allergy. The questionnaire and consent form were given to the patient in printed form and completed by the patients themselves.

Ethical approval was obtained from the Scientific Research Ethics Committee of Adana City Training and Research Hospital (Decision No: 744/17, Date: September 25, 2025). Written informed consent was obtained from all participants and was conducted in accordance with the principles of the Declaration of Helsinki.

Statistical Analysis

Statistical analysis were performed using the Jamovi software (version 2.6). Continuous variables were presented as medians (interquartile range), and categorical variables were expressed as numbers (percentage). The normality of continuous variables was assessed using the Shapiro-Wilk test. As the data were not normally distributed, non-parametric tests were used for group comparisons. The Mann-Whitney U test was applied for comparisons between two groups, and the Kruskal-Wallis test was used for comparisons among more than two groups, followed by pairwise comparisons when appropriate. Associations between continuous variables were evaluated using Spearman correlation analysis. Multivariable linear regression analysis was performed to identify independent factors associated with knowledge scores, including demographic variables, attitude scores, and practice-related variables in the model. Internal consistency of the questionnaire sections was assessed using Cronbach's alpha coefficient. A *p*-value of <0.05 was considered statistically significant.

RESULTS

A total of 189 patients were included in the study. The median age of the participants was 40 years, with an age range of 18-79 years (IQR: 23). Of the participants, 59.6% (n=112) were female. Regarding the educational level, 40.2% (n=76) had completed university education. A previous diagnosis of drug allergy was reported by 41.8% of the patients (n=79). This refers to patients who expressed experiencing allergies or who were assessed as having a drug allergy by a healthcare professional in a healthcare setting and received a possible diagnosis verbally or in writing. When reasons for referral to an allergy specialist were examined, the most common reason was presentation following an acute reaction (36.5%). Demographic and clinical characteristics of the study population are presented in Table I.

The median total knowledge score derived from the knowledge questions was 8, with scores ranging from 2 to 10 (IQR: 2). Analysis of correct response rates showed that the highest proportion of correct answers was observed for Question 5 at 96.8% (n=183). Among the items with relatively lower performance, the correct response rate for Question 10 was 68.3% (n=129) (Table II). Distribution of total knowledge scores demonstrated that 26.5% of participants answered 8 questions correctly and 25.4% answered 9 questions correctly. Overall, 9.0% of participants answered all questions correctly.

The median mean attitude score was 3.50, with values ranging from 0 to 4 (IQR: 1). The median total attitude

score was 14, with scores ranging from 0 to 16 (IQR: 4). Evaluation of the attitude scale demonstrated that the majority of participants responded favorably to the statements. The proportion of participants selecting “strongly agree” was 67.7% (n=128) for Question 3.11, 76.2% (n=144) for Question 3.12, 60.8% (n=115) for Question 3.13, and 49.7% (n=94) for Question 3.14. Internal consistency of the attitude scale was acceptable, with a Cronbach’s alpha coefficient of 0.754.

Table I: Demographic and clinical characteristics of the study population (n=189)

Variables	n (%)
Age, years	Median: 40
Sex	
Female	112 (59.6)
Male	76 (40.4)
Education level	
Primary school	43 (22.8)
Secondary/high school	70 (37.0)
University	76 (40.2)
Previous diagnosis of drug allergy	
Yes	79 (41.8)
No	110 (58.2)
Reason for healthcare admission	
After an acute reaction	69 (36.5)
Physician referral	66 (34.9)
Self-admission	48 (25.4)

Table II: Distribution of correct response rates for knowledge questions

Question Number	Correct answers n (%)
Question 1 (If I am allergic to one antibiotic (e.g., penicillin), I am also allergic to all antibiotics)	157 (83.1)
Question 2 (Drug side effects (e.g., stomach pain, dizziness) are the same as drug allergy)	137 (72.5)
Question 3 (An allergy cannot develop later to a drug that I previously used without problems)	147 (77.8)
Question 4 (If I am allergic to analgesic-non steroidal anti-inflammatory drugs-, I cannot use any analgesics)	139 (73.5)
Question 5 (In suspected drug allergy, the medication should be stopped immediately and medical advice should be sought)	183 (96.8)
Question 6 (Individuals with painkiller or antibiotic allergy cannot receive anesthesia for any dental treatment)	139 (73.5)
Question 7 (The diagnosis of drug allergy can be definitively confirmed for every drug with a single blood test)	161 (85.2)
Question 8 (If I am allergic to one drug, I need to undergo testing every time before using other medications)	109 (57.7)
Question 9 (A label of “antibiotic allergy” may lead to unnecessary changes in antibiotic treatment)	121 (64.0)
Question 10 (Drug allergies are predictable conditions)	129 (68.3)

Comparison of knowledge scores according to sex revealed no statistically significant difference between groups ($p=0.527$). However, knowledge scores differed significantly according to educational level (Kruskal-Wallis $\chi^2=23.6$, $p<0.001$). Pairwise comparisons demonstrated that university graduates had significantly higher knowledge scores than both primary school and secondary/high school graduates.

No statistically significant difference in attitude scores was observed according to sex ($p=0.065$). Similarly, attitude scores did not differ significantly across educational levels ($p=0.072$) (Table III).

Evaluation of practice-related questions showed that only 18.0% of participants ($n=34$) reported having their drug allergy diagnosis confirmed by written documentation. These were formal/informal documents given by a healthcare professional after the patient experienced a drug allergy. A total of 59.8% ($n=113$) indicated that they always disclosed their drug allergy during physician visits and at pharmacies. Regarding willingness to undergo drug provocation testing, 78.3% of participants ($n=148$) stated that they would accept the test. When receipt of written

information regarding safe alternative medications for analgesic or antibiotic allergy was assessed, 27.5% of participants ($n=52$) reported having received such information. Practice-related data are presented in Table IV.

When the relationships among age, knowledge score, and attitude score were evaluated, a weak negative correlation was observed between age and knowledge score (Spearman $\rho=-0.244$, $p<0.001$), indicating that knowledge scores tended to decrease with increasing age. A weak positive correlation was identified between knowledge score and attitude score (Spearman $\rho=0.169$, $p=0.020$). In contrast, no significant association was found between age and attitude score ($p=0.995$).

DISCUSSION

In the present study, the majority of patients with a history of drug allergy were female. Negative correlations were observed between age and all questionnaire scores, whereas a positive correlation was identified between knowledge and attitude scores. In addition, educational level was significantly associated with knowledge score. Although the impact of drug allergy on quality of life has been widely discussed, data regarding patients' knowledge and attitudes toward drug allergy remain limited in the literature.

Drug hypersensitivity reactions are common allergic conditions in adulthood. Although prevalence varies according to the mean age of the study population and whether participants are evaluated in inpatient or outpatient settings, the self-reported prevalence of DHRs ranges between 7% and 20% (4,5). Approximately 25% of our patients presented to the allergy clinic on their own initiative following a drug-related reaction.

Many patients with a history of drug hypersensitivity continue to carry this label without undergoing further diagnostic evaluation by an allergy specialist (4,6,7). This may be due to several factors, including: reactions being rarely documented; the influence of factors other than the suspected drug (such as illnesses, side effects, additives); or decreased sensitivity due to the long time elapsed since the reaction. Another contributing factor may be physicians' reluctance to perform diagnostic testing due to the lack of universally standardized diagnostic protocols for certain drugs (8,9). In our cohort, only 18% of patients had documented records related to drug allergy prior to evaluation by an allergy specialist. Although 48% reported having

Table III: Comparison of knowledge scores and attitude scores according to demographic variables

Variables	Knowledge Score p-value	Attitude Score p-value
Sex	0.527	0.065
Education level	<0.001*	0.072

* $p<0.05$ was considered statistically significant.

Table IV: Responses to practice-related questions regarding drug allergy management among participants ($n=189$)

Practice-related variables	Response	n (%)
Written confirmation of drug allergy diagnosis	Yes	34 (18.0)
	No	155 (82.0)
Disclosure of drug allergy during healthcare visits	Always	113 (59.8)
	Sometimes	45 (23.8)
	Rarely or never	31 (16.4)
	Accept	148 (78.3)
Willingness to undergo drug provocation testing	Refuse	40 (21.2)
	Undecided	1 (0.5)
	Accept	148 (78.3)
Receipt of written information on safe alternative medications	Yes	52 (27.5)
	No	137 (72.5)

previously received a diagnosis of drug allergy, this diagnosis appeared to have been based primarily on prior reactions and had not been formally documented in writing by an allergy specialist. Additionally, one-quarter of patients presented to an allergy specialist on their own initiative.

The self-reported prevalence of drug allergy was found to be 7.8% and 7.7% in two studies including 2,309 and 2150 patients, respectively (4,10). As our study was not designed as an epidemiological prevalence study, only the rates of self-referral and documented versus undocumented drug allergy diagnoses were evaluated; nevertheless, these findings were generally consistent with the existing literature.

Allergic drug reactions are generally more common in females than in males; however, this difference may vary depending on the type of reaction and the age distribution of the study population (11,12). A study from Türkiye demonstrated a significant association between female sex and a higher prevalence of drug hypersensitivity reactions (5). Similarly, female predominance was observed in our study population.

It has been suggested in the literature that underestimation of the relationship between a drug and the experienced reaction is one of the factors contributing to underreporting of these reactions (4). Another study reported that more than half of the participants sought medical attention during or after drug-related reactions. An additional concern relates to physicians' management of patients presenting with suspected drug reactions; in that study, only a small minority of patients were tested for alternative medications and informed about drug reactions. Furthermore, fewer than half of physicians were found to recommend long-term avoidance of the suspected drug (5). In an earlier study, only 9.7% of physicians referred patients to an allergy specialist for further evaluation, and 18.1% of patients were prescribed alternative medications without prior testing of their safety (12). In our study, 36.5% of patients presented to an allergy specialist following an acute/emergency reaction, whereas 34.9% were referred by a physician. In addition, only 27% of patients had information regarding safe alternative medications. Slightly more than half of the patients reported consistently informing healthcare providers about their previous drug allergy reactions during medical visits, while approximately 16% stated that they rarely or almost never disclosed such reactions. Collectively, these findings appear to be consistent with the existing literature.

Patient education regarding drug allergy is influenced by physicians' knowledge and experience and also affects patients' subsequent attitudes and behaviors. Physician guidance is therefore considered important in determining appropriate diagnostic evaluation and selection of alternative medications following a suspected drug reaction.

A large proportion of our study population expressed willingness to undergo drug provocation testing (DPT). However, some studies have shown the opposite. For example, one study reported that a definitive diagnosis was made with blood and/or skin tests in less than half of the cases, attributing this to the limited number of centers investigating drug allergies and the possibility that many patients were already convinced of their diagnoses. In addition, this study indicated that only 13.3% of participants wanted to be contacted for further evaluation of their reactions (4). The proportion of patients diagnosed or seeking evaluation for diagnosis appears to be lower in the literature than in our study. Studies evaluating anxiety levels related to drug provocation testing have been conducted in both parents of pediatric patients and adult patients. Compared with pre-test levels, anxiety was found to decrease following testing in both parents and adult patients (12,13). In a registry including approximately 600 patients, the most common patient concern was optimal medication use, while other concerns were related to allergic reactions and clarification of the diagnosis. Despite these concerns, 17% of patients reported no specific concerns and sought drug allergy evaluation solely as a precautionary measure (14). In that study, factors associated with greater patient concern included increasing age, a higher number of drug reactions, and the regular need for antibiotic treatment. In addition, female sex was associated with increased concern regarding severe allergic reactions (14). Drug-related allergic reactions may present across a broad clinical spectrum, ranging from mild cutaneous manifestations to severe reactions such as anaphylaxis. This variability may contribute to patients' fear of undergoing subsequent diagnostic or provocation testing. However, the educational level of our survey population was relatively high, and greater awareness and knowledge regarding drug allergy may partly explain the high willingness to undergo testing observed in our cohort. Although reaction severity was not assessed in our questionnaire, it should be considered that patients with milder or moderate prior reactions might have been more likely to accept drug provocation testing. The fact that our study population consisted exclusively of adults may also have contributed to greater self-acquired knowl-

edge regarding drug-related events. In addition, parental status may be associated with higher anxiety levels when making decisions for children, potentially contributing to lower acceptance of testing in pediatric settings.

In a study conducted in Türkiye using a parental attitude scale regarding medication use in children, a significant increase in correct and conscious medication use scores was observed with increasing parental educational level (15). Although studies on this topic remain limited, our findings support these observations. Educational level was significantly associated with knowledge scores. Half of the participants answered at least 8 questions correctly, and 9% answered all questions correctly, suggesting that higher knowledge levels may be related to educational attainment. The highest correct response rate was observed for Question 5, which addressed immediate discontinuation of the suspected drug and seeking medical attention following a drug allergy reaction. Given that this represents a broadly accepted general health behavior irrespective of educational background, the high rate of correct responses may be considered an expected finding.

We also found that participants younger than 40 years had higher knowledge scores, whereas sex was not a significant determinant of any questionnaire score. Higher knowledge scores observed in younger participants may be related to greater access to digital health information sources, higher health literacy, and more active engagement with healthcare services. Conversely, the lack of association between sex and knowledge or attitude scores suggests that awareness regarding drug allergy may be shaped more by individual educational background and healthcare experiences than by demographic characteristics alone.

This study has several limitations. First, the single-center design may limit the generalizability of the findings to other populations and healthcare settings. Second, the relatively modest sample size may have reduced the ability to detect weaker associations, particularly in subgroup analyses. Third, because the study population consisted exclusively of adult patients presenting to a tertiary allergy center, selection bias may be present, and the findings may not fully reflect the general population or pediatric patients. Fourth, as the questionnaire data were based on self-report, recall bias and social desirability bias may have influenced participant responses. Finally, the severity, tim-

ing, and phenotype of previous drug hypersensitivity reactions were not systematically assessed, which may have affected knowledge, attitude, and practice outcomes.

CONCLUSION

In conclusion, this study demonstrates that adult patients with a history of drug hypersensitivity generally possess favorable knowledge and attitudes regarding drug allergy; however, important gaps remain in the documentation of drug allergy, communication with healthcare professionals, and real-world management practices. A higher educational level was associated with better knowledge scores. Despite a high degree of willingness among participants to undergo further diagnostic evaluation, rates of written diagnostic confirmation and provision of information regarding safe alternative medications remained low. These findings highlight the importance of strengthening patient education, promoting standardized documentation practices, and expanding specialist-guided drug allergy evaluation to improve patient safety and long-term management.

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Conflict of Interest

The authors declare no conflict of interest.

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Informed Consent Statement

This study is retrospective. No additional tests were requested from the patients for the study. No procedures were performed on the patients without their consent.

Data Availability Statement

The datasets used and analyzed during the current study are available from the corresponding author on reasonable request.

Author Contributions

Concept: LC, GO, Design: LC, Data collection or processing: LC, GO, Analysis or Interpretation: LC, GO, Literature search: LC, Writing: LC, GO, Approval: LC, GO.

REFERENCES

1. Doña I, Torres MJ, Celik G, Phillips E, Tanno LK, Castells M. Changing patterns in the epidemiology of drug allergy. *Allergy* 2024;79(3):613-28. doi:10.1111/all.15970

2. Broyles AD, Banerji A, Castells M. Practical Guidance for the Evaluation and Management of Drug Hypersensitivity: General Concepts. *J Allergy Clin Immunol Pract* 2020;8(9S):S3-15. doi:10.1016/j.jaip.2020.08.002
3. Mayorga C, Fernandez TD, Montañez MI, Moreno E, Torres MJ. Recent developments and highlights in drug hypersensitivity. *Allergy* 2019;74(12):2368-81. doi:10.1111/all.14061
4. Gomes E, Cardoso MF, Praça F, Gomes L, Mariño E, Demoly P. Self-reported drug allergy in a general adult Portuguese population. *Clin Exp Allergy* 2004;34(10):1597-601. doi:10.1111/j.1365-2222.2004.02070.x
5. Bavbek S, Çelik GE, Aydın Ö, Öner Erkeköl F, Kurşun N, Mungan D, et al. Prevalence of hypersensitivity reactions against drugs among adult population in Turkey: a self-reported survey. *Journal of Public Health* 2012;20(6):585-92. doi:10.1007/s10389-012-0496-9
6. deShazo RD, Kemp SF. Allergic reactions to drugs and biologic agents. *JAMA* 1997;278(22):1895-906. PubMed PMID: 9396651.
7. Demoly P, Bousquet J. Epidemiology of drug allergy. *Curr Opin Allergy Clin Immunol* 2001;1(4):305-10. doi:10.1097/01.all.0000011031.16814.e0
8. Aberer W, Bircher A, Romano A, Blanca M, Campi P, Fernandez J, et al. Drug provocation testing in the diagnosis of drug hypersensitivity reactions: general considerations. *Allergy* 2003;58(9):854-63. doi:10.1034/j.1398-9995.2003.00279.x
9. Brockow K, Romano A, Blanca M, Ring J, Pichler W, Demoly P. General considerations for skin test procedures in the diagnosis of drug hypersensitivity. *Allergy* 2002;57(1):45-51. PubMed PMID: 11991289.
10. Falcão H, Lunet N, Gomes E, Cunha L, Barros H. Drug allergy in university students from Porto, Portugal. *Allergy*. 2003;58(11):1210. doi:10.1034/j.1398-9995.2003.00291.x
11. Barranco P, López-Serrano MC. General and epidemiological aspects of allergic drug reactions. *Clin Exp Allergy* 1998;28 Suppl 4:61-2. PubMed PMID: 9761035.
12. Vural Solak GT, Aksu K, Yağdıran M, Dindar Çelik F, Akkale Ö, Telli O, et al. Evaluating the Effect of Drug Provocation Tests on Anxiety and Hopelessness Levels. *Medicina (Kaunas)* 2025;61(6):1014. doi:10.3390/medicina61061014
13. Yilmaz Topal O, Turgay Yagmur I, Kulhas Celik I, Uneri OS, Toyran M, Karaatmaca B, et al. Psychological Distress and Drug Provocation Test-Related Anxiety Levels of Pediatric Patients and Their Parents. *Pediatric Allergy, Immunology, and Pulmonology*. 2022;35(2):58-64. doi:10.1089/ped.2021.0092
14. Blumenthal KG, Harkness T, Phillips EJ, Ramsey A, Banerji A, Samarakoon U, et al. Patient Characteristics and Concerns about Drug Allergy: A Report from the United States Drug Allergy Registry. *J Allergy Clin Immunol Pract* 2020;8(9):2958-67. doi:10.1016/j.jaip.2020.08.018
15. Çiğdem Z, Biner BŞ, Çelik MY. Çocuğu Hastanede Yatan Ebeveynlerin Akılcı İlaç Kullanımına Yönelik Tutumlarının Değerlendirilmesi: Kesitsel Bir Araştırma. *Türkiye Klinikleri J Nurs Sci* 2024;16(3):669-80. doi:10.5336/nurses.2023-100673

Questionnaire on Common Misconceptions About Drug Allergies

1) Demographic Characteristics

1. Age: _____
2. Sex: ☐ Female ☐ Male ☐ Other / Prefer not to say
3. Educational status: ☐ Primary school ☐ Secondary/High school ☐ University or higher
4. Have you ever been diagnosed with a “drug allergy”? ☐ Yes ☐ No
5. Reason for attending the Allergy/Immunology outpatient clinic: ☐ Physician referral ☐ Self-referral ☐ After an acute reaction ☐ Other: _____

2) Knowledge Questions (True-False)

1. If I am allergic to one antibiotic (e.g., penicillin), I am also allergic to all antibiotics. ☐ True ☐ False
2. Drug side effects (e.g., stomach pain, dizziness) are the same as drug allergy. ☐ True ☐ False
3. An allergy cannot develop later to a drug that I previously used without problems. ☐ True ☐ False
4. If I am allergic to non steroidal anti-inflammatory drugs, I cannot use any analgesics. ☐ True ☐ False
5. In suspected drug allergy, the medication should be stopped immediately and medical advice should be sought. ☐ True ☐ False
6. Individuals with painkiller or antibiotic allergy cannot receive anesthesia for any dental treatment. ☐ True ☐ False
7. The diagnosis of drug allergy can be definitively confirmed for every drug with a single blood test. ☐ True ☐ False
8. If I am allergic to one drug, I need to undergo testing every time before using other medications. ☐ True ☐ False
9. A label of “antibiotic allergy” may lead to unnecessary changes in antibiotic treatment. ☐ True ☐ False
10. Drug allergies are predictable conditions. ☐ True ☐ False

3) Attitudes

11. “It is important for me to have my drug allergy label verified (if necessary, by testing/provocation).”
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ (1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree)
12. “I believe that confirmation of a drug allergy diagnosis by a specialist physician using diagnostic tests is important.”
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ (1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree)
13. “I believe that drug provocation testing can be safe.”
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ (1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree)
14. “I believe that an incorrect drug allergy label may negatively affect my treatment.”
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ (1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree)

4) Practice

15. Has your “drug allergy” diagnosis ever been confirmed with a written medical report?
☐ Yes ☐ No
16. Do you inform healthcare professionals about your drug allergies at every doctor’s appointment and pharmacy visit?
☐ Always ☐ Sometimes ☐ Rarely/Never
17. If recommended by your physician, would you agree to undergo a “drug provocation test” (a test performed by administering the suspected drug under controlled conditions)?
☐ Yes ☐ No ☐ Undecided
18. (If applicable) Have you received written information about safe alternative medications for your painkiller/antibiotic allergy?
☐ Yes ☐ No