PENICILLIN ALLERGY DE-LABELING IN PUERTO RICO: PERCEPTIONS AND PRACTICES AMONG PHYSICIANS



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INTRODUCTION

- •Over 80% of self-reported penicillin allergies are not true allergies and are inaccurately labeled, leading to increased medical costs, post-surgical complications, and reliance on second-line antibiotics.
- •Recent evidence has increasingly supported the safety and benefits of de-labeling; however, the extent of its implementation within Puerto Rico's healthcare context remains unexplored.
- •This study aims to examine current practices, perceived limitations, and attitudes related to penicillin allergy de-labeling among physicians in Puerto Rico.

METHODS

- •Participants: Physicians currently practicing in Puerto Rico.
- •Assessment: Anonymous REDCap survey exploring:
 - Current Practices
 - Frequency of De-Labeling
 - Perceived Limitations
 - Attitudes

RESULTS

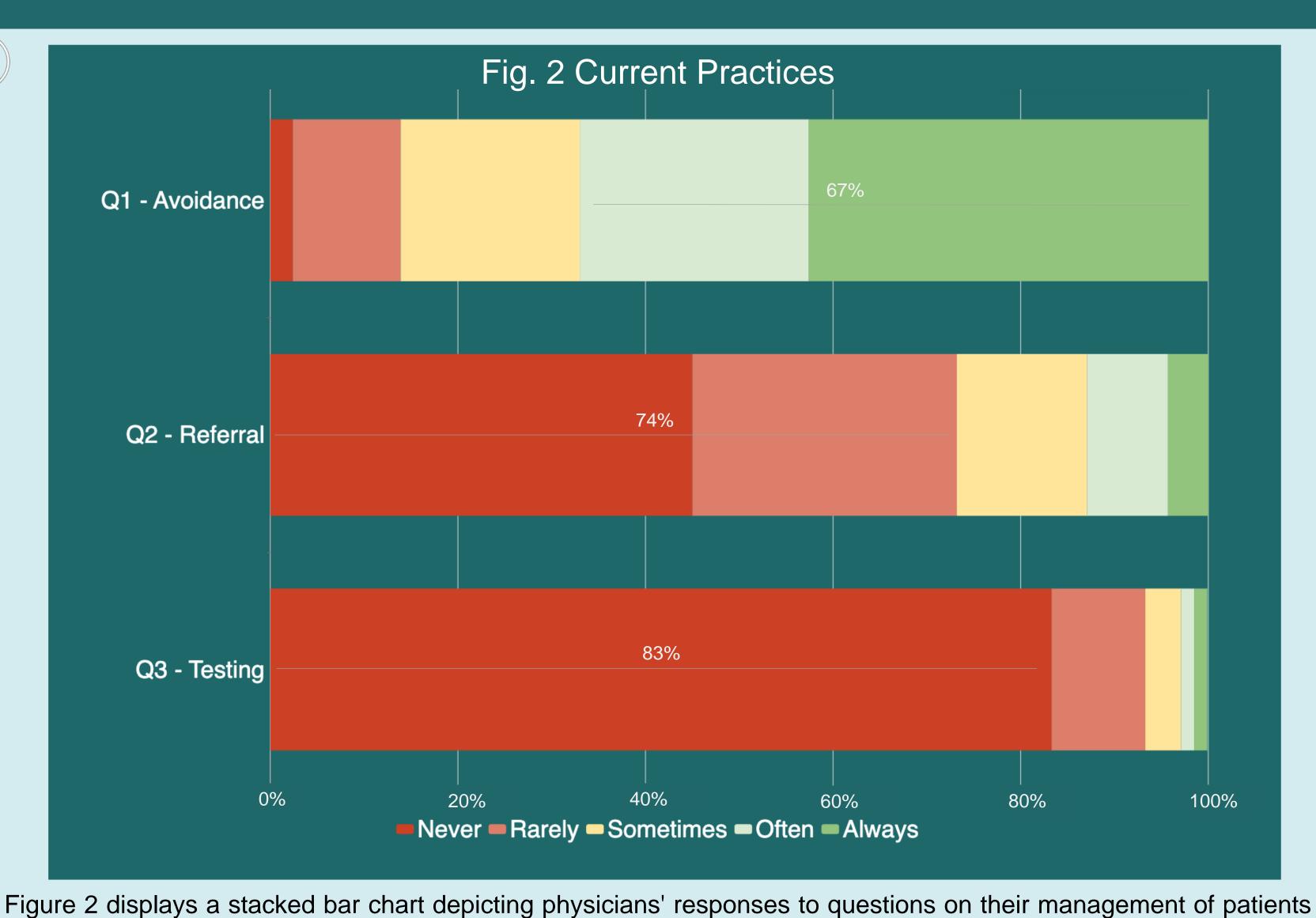
- •Participation: 209 physicians completed the survey.
- •Current Practices: Reluctance to de-label, with majority avoiding penicillin prescriptions without confirmation of allergy.
- •Frequency of Delabeling: Only 44% of respondents had encountered de-labeled patients, with only 19% attempting it.
- •Perceived Limitations: Concerns over adverse reactions, lack of clear guidelines, and limited access to allergy testing facilities/materials were predominant limitations.
- •Attitudes: Despite this, the attitude towards de-labeling was overwhelmingly positive, highlighting its perceived safety, potential for cost savings, and resistance reduction.

DEMOGRAPHICS

Fig. 1A Specialties		Fig. 1B Institutions	
		Institution	Count
Specialty	Count	Auxilio Mutuo Hospital	6
Anesthesiology	3	Bayamon Medical Center	7
Emergency Medicine	11	Centro Médico (RCM)	17
Family Medicine	36	Doctor's Center Hospital	5
Gastroenterology	2	Episcopal San Lucas Hospital	7
General Practice	27	HIMA San Pablo Hospital	7
General Surgery	4	Hospital Metropolitano	9
Infectious Diseases	8	Hospital Universitario	4
Internal Medicine	10	Mayagüez Medical Center	7
Nephrology	2	Menonita Hospital	27
OBGYN	9	Pavia Hospital	8
Orthopedic Surgery	48	Pediatric Hospital	4
Pediatrics	36	Presbyterian Hospital	5
Plastic Surgery	3	Private Practice	58
Other	10	Other	38

Figure 1 presents two bar charts detailing survey demographics: (A) displays the number of physicians by medical specialty, with less frequent specialties grouped as "Other"; (B) shows the count of physicians by the institution, with "Other" representing institutions with fewer physicians.

CURRENT PRACTICES

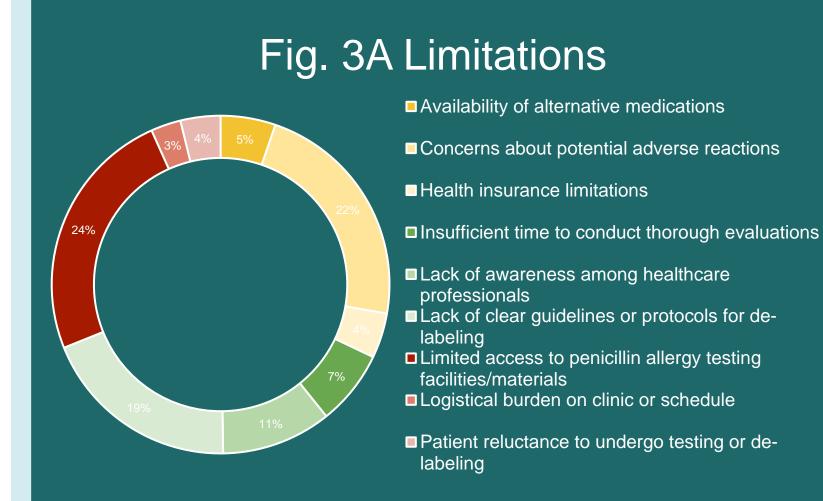


with self-reported penicillin allergies. Q1 shows the proportion of physicians who refrain from prescribing penicillin to patients with self-reported allergies. Q2 reflects how frequently physicians refer patients for allergist evaluation. Q3 represents the frequency of conducting allergy tests before prescribing penicillin.

CONCLUSIONS

- •There is a clear discrepancy between the positive perceptions of penicillin allergy de-labeling and its clinical practice implementation in Puerto Rico.
- •Addressing the identified limitations, particularly through educational interventions and improved clinical protocols, may enhance de-labeling practices.
- •Further investigation with a larger sample is warranted to confirm these initial observations and to fully understand the scope and impact of de-labeling practices on the island.

LIMITATIONS AND ATTITUDES



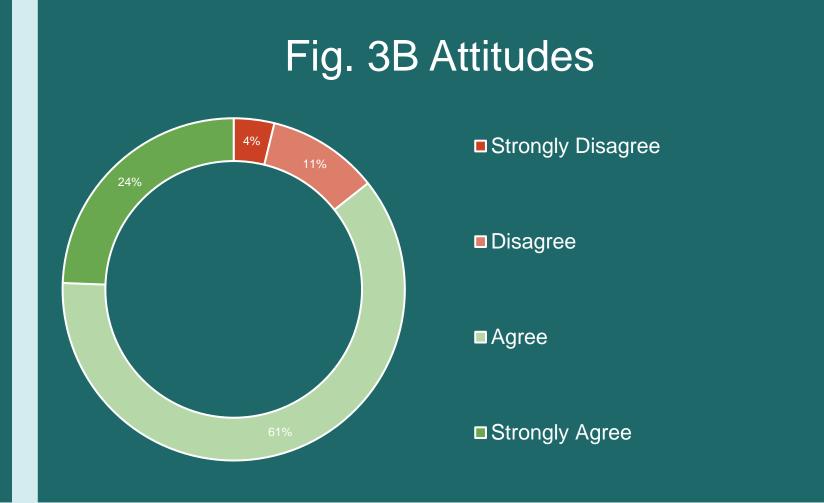


Figure 3 comprises two donut charts summarizing physician perspectives on penicillin allergy de-labeling. Chart 3A visualizes identified primary barriers to implementation, highlighting limited testing facilities and logistical challenges as the most prevalent. Chart 3B captures attitudes towards the safety of de-labeling, with a dominant share of respondents concurring with the practice's safety.