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Assessment of knowledge, awareness of symptoms, risk factors, preventive measures, and perceptions related to thyroid disease among adults of Lahore, Pakistan

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Abstract

Background: Thyroid disorders are becoming more common, yet many people do not recognise their symptoms, risk factors, or options for prevention. This study assessed the knowledge, awareness, and perception of thyroid disease among adults in Lahore, Pakistan. **Subject and methods:** A cross-sectional survey was conducted among 391 adults using convenience sampling in public areas of Lahore. A structured questionnaire was used to assess recognition of thyroid symptoms, awareness of risk factors and prevention, and perceptions of disease.

Descriptive statistics were generated. Differences in knowledge, awareness, and perception across demographic groups were analysed using the Mann–Whitney U test, the Kruskal–Wallis test, and regression in SPSS version 27. **Results:** Most respondents were female (55.0%), aged 18–24 years (36.3%), had formal education (76.7%), and lived in metropolitan areas (66.2%). Neck swelling (61.9%) and goitre (47.1%) were the most frequently recognised symptoms. Thyroid screening was identified as a key preventive measure by 55.8% of participants. Overall, knowledge was low: only 38.0% demonstrated good knowledge, while 62.0% had poor knowledge. Many participants agreed that obesity (39.1%) and poor diet (29.4%) increase thyroid risk. Greater awareness was

observed among younger participants ($p = 0.001$), those with higher education ($p = 0.001$), and urban residents ($p = 0.036$). More accurate perceptions were also associated with higher education ($p = 0.027$) and better understanding of thyroid-related topics ($p = 0.009$). Conclusion: There are clear gaps in public knowledge of thyroid disease, despite some awareness of symptoms and risk factors. Targeted health education is needed to improve early recognition, screening, and prevention in the community. © The Author(s) 2026.

Author keywords

Thyroid awareness; Thyroid disease; Thyroid perception; Thyroid prevention; Thyroid risk

Indexed keywords

EMTREE drug terms

amiodarone; lithium

EMTREE medical terms

adult; aged; Article; awareness; body weight; body weight gain; chronic cough; cross-sectional study; dysphagia; dyspnea; exercise; fatigue; female; goiter; hair loss; Hashimoto disease; health education; heart rate; hoarseness; human; knowledge; major clinical study; male; muscle weakness; neck swelling; perception; questionnaire; risk factor; smoking; smoking cessation; structured questionnaire; thyroid disease; thyroid gland; thyroiditis; wheezing

Device trade names

Commercial names given to devices, used for branding and differentiation in the market, commonly referenced in scientific and clinical research.

Tradename	Country	Manufacturer
SPSS version 27 software		SPSS

Chemicals and CAS Registry Numbers

Unique identifiers assigned by the Chemical Abstracts Service (CAS) to ensure accurate identification and tracking of chemicals across scientific literature.

amiodarone	1951-25-3, 19774-82-4, 62067-87-2
lithium	7439-93-2

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