



Aspirin Use among Saudi Adults: The Prevalence and Users' Characteristics

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INTRODUCTION

Aspirin has been approved in decreasing CVD morbidity and mortality in patients with high risk of CVD or those underwent CVD procedures⁽¹⁾.

The evidence base of aspirin's safety and efficacy for primary prevention vary amongst randomized controlled trials making important variability in the professional guidelines⁽¹⁾.

Aspirin is suggested for modestly high-risk patients by the U.S. Preventive Services Task Force⁽³⁾, but it is not suggested for primary prevention for any risk level by the European Society of Cardiology.

Around of 23.4% (\approx 29 million participants) of adults in the United States use aspirin as primary prevention agent for CVD. Of those (22.8%; 6.6 million) use aspirin independently without any medical advice⁽⁴⁾.

In Saudi Arabia, few studies have been published to find the prevalence of aspirin use⁽²⁾ (5).

Additionally, presence of public data regarding the aspirin usage would assess the clinical compliance of our patients and clinicians practice toward the national guidelines and recommendations.

OBJECTIVES

The purpose of this study was to evaluate the prevalence of aspirin use and identify the demographic and clinical characteristics among Saudi users.

METHODS

Study design and participants:

A cross-sectional online-based study was conducted among adult Saudi people for over a period of four months in 2021 using self-administrated questionnaires. Participants who were below 18 years old or non-Saudis were excluded from the study.

Study questionnaires and procedure:

A self-administered validated questionnaire was adapted from the previous studies⁽³⁾. The study questionnaire included the prevalence of aspirin use and participant's characteristics according to prevention type, the survey revealed the participant's knowledge and perception of aspirin, and showed attitude, pattern and reason use of aspirin among primary and secondary prevention users of aspirin.

The pilot study was conducted to ensure the readability and accuracy of the questionnaire among the targeted population. The reliability of the questionnaire was assessed with Cronbach's alpha coefficient of 0.7. All Saudi adults were enrolled using different social media. We recruited participants via survey link using a snowball technique, with multiple referrals.

Data analysis:

The data were extracted and analyzed using the Statistical Package for Social Sciences version 26.0 (SPSS Inc., Chicago, IL, USA). A p-value of less than 0.05 was considered statistically significant. Descriptive analysis was performed. Categorical data were calculated as frequencies and percentages. Other statistical tests like the chi-square test were applied to find out the association between the variables.

RESULTS

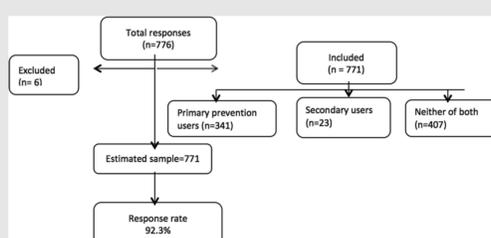


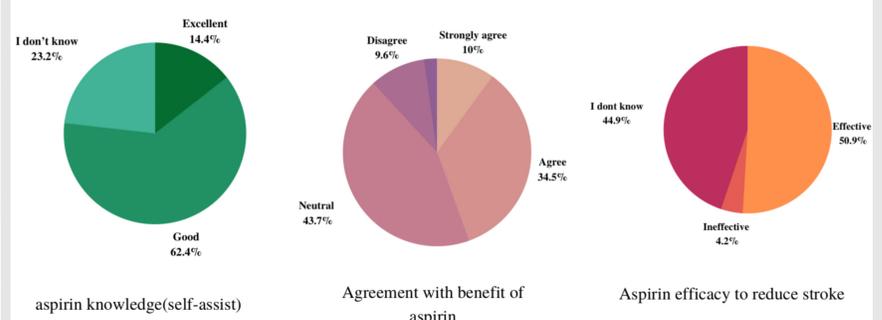
Fig.1 Flowchart of responses.

- The prevalence of aspirin use among the Saudi population was **47% (n=364)**.

According to the use of aspirin based on the type of prevention:

- Primary prevention users were (n = 341; 44%)
- Secondary prevention users (n = 23; 3%).

Fig.2 Participants' knowledge and perception of aspirin.



There was a significant difference between gender and user type ($p = 0.001$). Females were higher as primary prevention users compared to males (66% vs. 34%) while males used aspirin as secondary prevention agent more than females (78.3% vs. 21.7%). The results found a significant association between participant's user type and participant's smoking status, past medical history, and presence of comorbidities ($p = 0.001$).

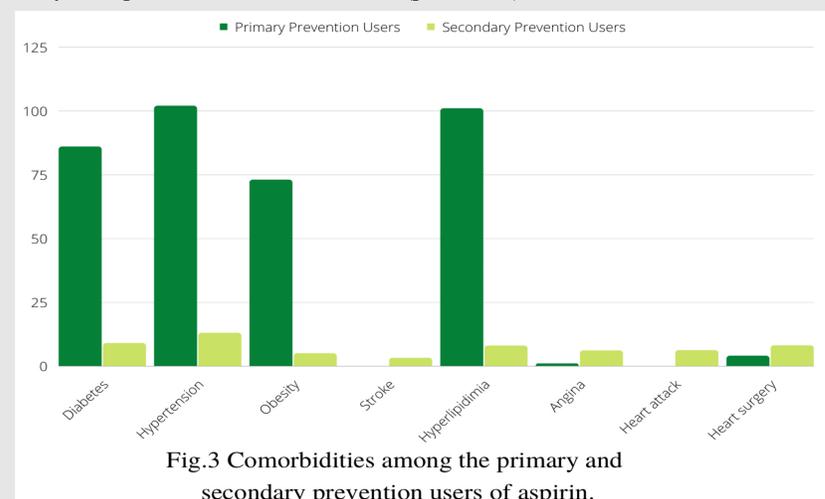


Fig.3 Comorbidities among the primary and secondary prevention users of aspirin.

Table 1: Attitude, patterns and reasons among primary and secondary prevention users of aspirin (n = 364).

Characteristic (Highest answer)	Primary prevention (n=341)	Secondary prevention (n=23)
Use aspirin advice from	Healthcare providers 188 (55.1)	Healthcare providers 14 (60.9)
Use aspirin by prescription	Yes, currently use the prescription aspirin 117 (34.3)	Yes currently use the prescription aspirin 18 (78.3)
Pattern/type of aspirin use	Previously Took aspirin on a regular basis 136 (39.9)	Currently taking aspirin on a regular cases 17 (73.9)
Indication of aspirin	Clot prevention 242 (71.0)	Clot prevention 17 (73.9)
Discussed regular Aspirin use with medical staff	No 222 (65.1)	No (60.9)

Around 31% use their aspirin without prescription. Such practice may expose the general population to the harmful adverse effects of aspirin.

DISCUSSION AND CONCLUSIONS

Our findings observed that use of aspirin is significantly associated with gender, social habits and presence of disease. Our results were somewhat similar to previous study results that reported that healthy lifestyle, including trying to stop smoking, eating healthy food, and getting more exercise were significantly associated with aspirin use. Aspirin use is commonly prevalent Saudi population with good level of knowledge of the therapy; however, its popular use as primary preventive agent for CVD may necessitate medical advice based on the level of cardiovascular risk.

REFERENCES

