

Aspirin Use for Secondary Cardiovascular Disease Prevention in Jamaica: Adherence and Barriers

SCHOOL OF PHARMACY

Kristen Kennedy, PharmD Candidate; Hannah Wood, PharmD Candidate; J. Christopher Lynch, PharmD

BACKGROUND

- CVD is a leading global cause of morbidity and mortality.
- In Jamaica, it accounts for four of the top five causes of death.
- Aspirin is crucial for secondary cardiovascular prevention.
- Aspirin use in Jamaica is suboptimal due to:
- Limited healthcare access.
- Financial constraints.
- Insufficient patient education.
- Addressing non-adherence is essential to:
- Reduce CVD-related morbidity and mortality.
- Support public health and global goals, including UN Sustainable Development Goals.

PURPOSE

Evaluate aspirin adherence for secondary cardiovascular prevention in rural Jamaica, identify demographic and clinical factors influencing its use, and explore barriers to adherence.

METHODS

July 21, 2024 – July 22, 2024
21 patients eligible

Included (n = 21)

- Age ≥ 18 years old
- Any 1 or more of the following:
- Previous myocardial infarction
- Angina
- Chest pain on exertion
- Heart failure
- Atrial fibrillation

Primary Outcome

Aspirin adherence rate

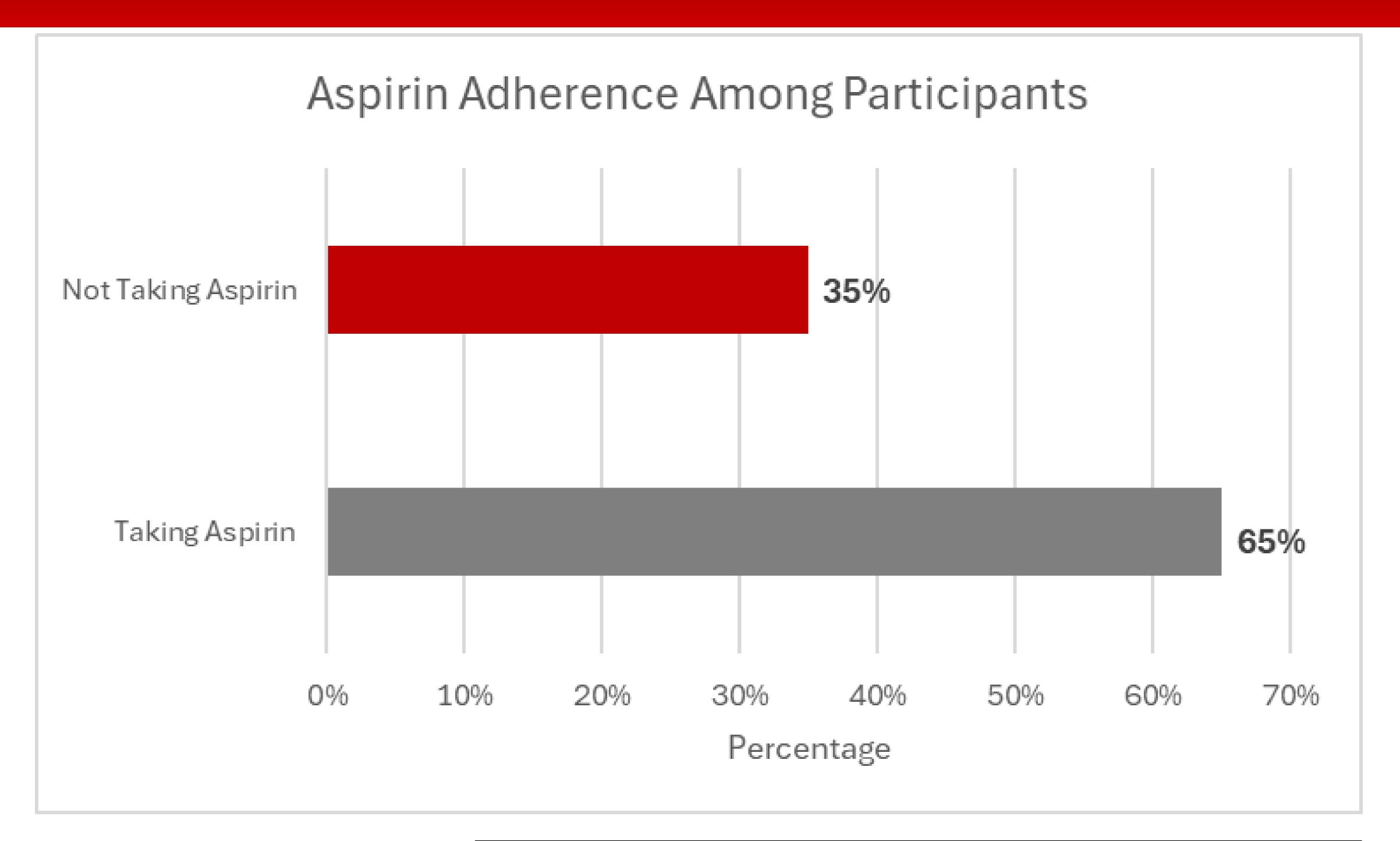
Excluded (n = 5)

- Age < 18 years old
- Indications other than secondary prevention (i.e. pain/primary prevention)
- Individuals with incomplete/invalid survey responses

Secondary Outcome

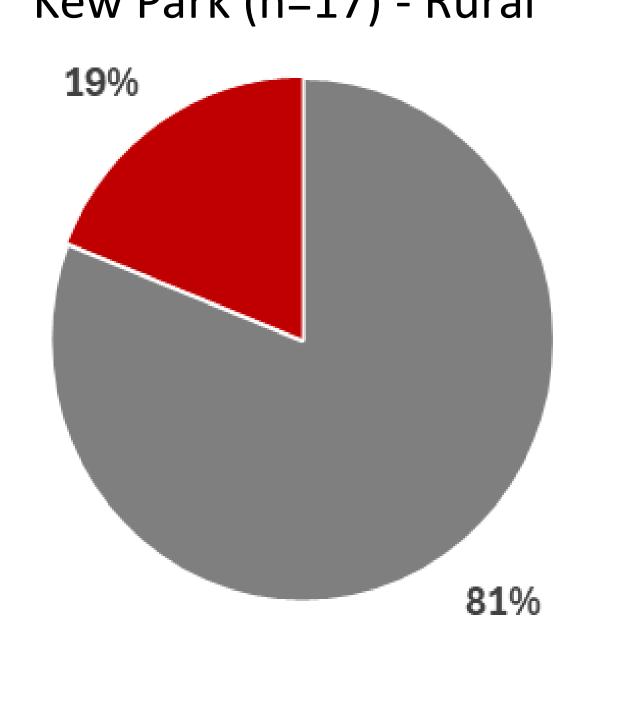
- Barriers to aspirin adherence
- Demographic insights (age, gender, geographics)
- Prescribing status

RESULTS



Cohorts by Location

- Flankers (n =4) Urban
- Kew Park (n=17) Rural



■ Kew Park
■ Flankers

Secondary Outcomes		Percentage (%)
Barriers to Aspirin Adherence	Missed doses	57%
	Believed it was unnecessary	67%
Prescribing Status	Prescribed by a physician	79%
	Not prescribed by a physician	21%

LESSONS LEARNED

We discovered that having the patients complete the survey prior to receiving their dental services made them feel more nervous and anxious. Initially, we thought that having individuals complete all their paperwork before they went back to get their dental care would be the best flow and overall, more convenient. However, feedback from patients revealed that even well-intended questions regarding cardiovascular health often led to increased worry that they would not be able to seek dental care. This understanding shifted our approach to bettering our communication, emphasizing reassurance and clear, calming explanations, ultimately trying our best to create a more comfortable and trusting environment. We also tried problem solving by shifting the survey to be a part of the checkout process.

FUTURE PLANS

- Further research with a larger cohort is needed to validate findings and inform targeted public health interventions.
- Choosing an alternative environment to conduct the survey and then compare the results.

CONCLUSION

- Suboptimal aspirin use for secondary cardiovascular prevention was observed mostly in rural Jamaica.
- Barriers to adherence are primarily associated with health literacy and environmental factors.
- Geographic differences between Kew Park and Flankers highlight the need for community-specific strategies.
- Study limitations include:
- Small sample size
- Response bias
- Impact of a recent hurricane on clinic attendance
- Findings provide valuable insights into adherence challenges despite these limitations.
- Addressing identified barriers is essential for improving cardiovascular health outcomes.