

Prevention of Asthma Attacks among Middle School Athletes through Educational Intervention

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PICOT Question

For middle school athletes with asthma, does the use of an asthma attack prevention training by the school nurse reduce the incidence of asthma attacks compared with current practice?

P: middle school athletes with asthma
I: asthma attack prevention training by school nurse
C: current practice
O: decreased incidence of asthma attacks

Literature Search

Key Terms

- Asthma prevention
- School nursing
- Childhood asthma
- School asthma
- Asthma interventions

Databases Used:

- PubMed
- Cumulative Index of Nursing and Allied Health Literature (CINAHL)
- MEDLINE

Criteria:

- Published between 2016-2021
- Published in peer-review journal
- Contained information about pediatric asthma interventions or school nursing interventions
- Published or translated in English



(Nurse and child with asthma, N.D.)



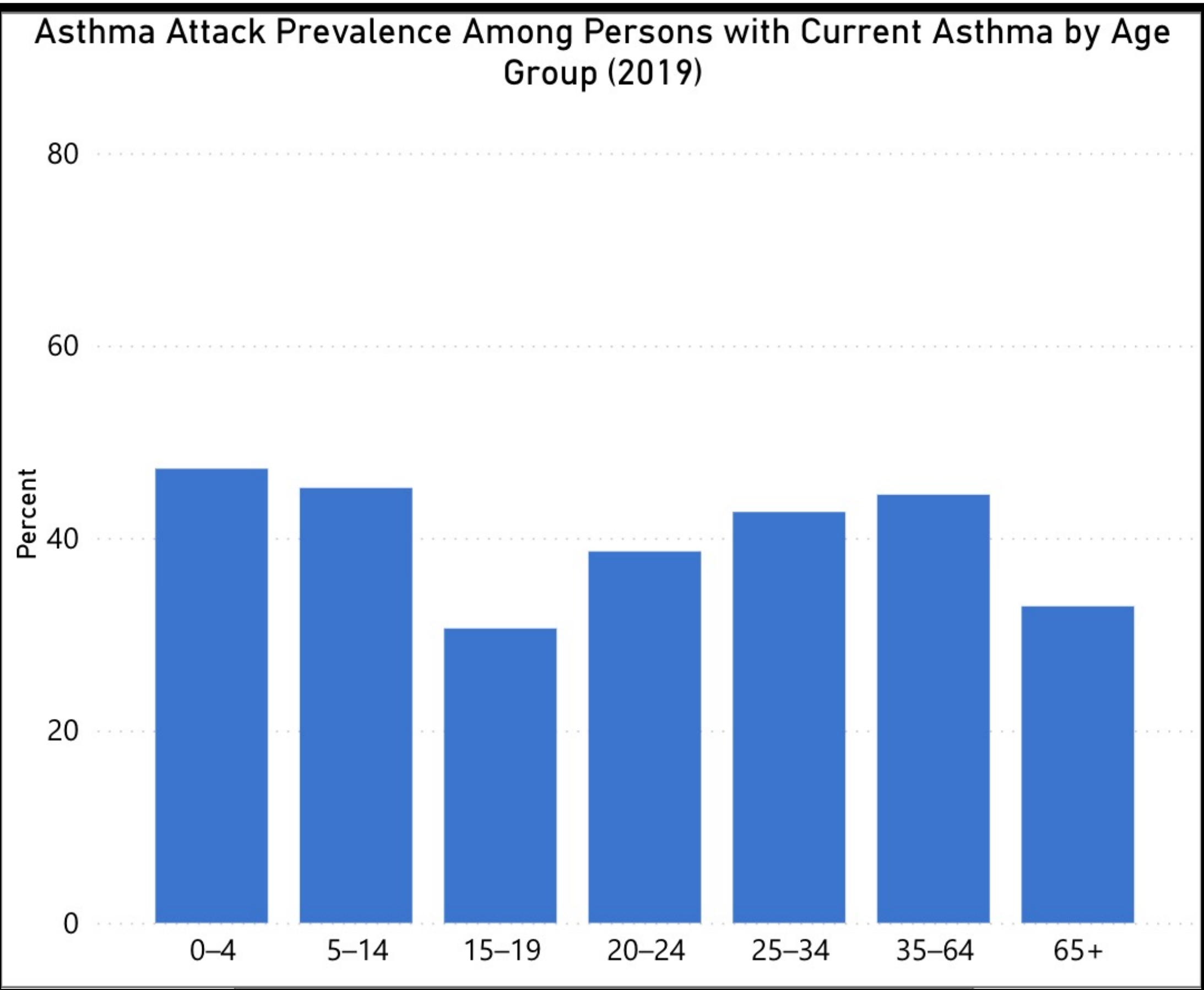
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Synthesis of Findings

- Individuals who received group education about asthma were less likely to experience severe outcomes such as asthma attacks and exacerbations (Harris et al., 2019; Isik et al., 2020; Martínez-González et al., 2020; Root & Small, 2019).
- Programs integrated into the school setting showed to be a feasible environment for teaching about asthma injury prevention (Harris et al., 2019; Isik et al., 2020; Rebmann et al., 2017).
- When caretakers of multiple settings (home, school, etc.) are involved in the child’s asthma care plan, there is a higher level of confidence that the plan will be successful (Rebmann et al., 2017; Sansgiry & Almogbel, 2016).
- Interventions created and led by school nurses were successful in improving health outcomes among students (Isik et al., 2020; Rebmann et al., 2017).

Decision to Change Practice

An in-school service would be beneficial in identifying asthma triggers and responses in a setting where asthma attacks are likely to occur. In addition to the current practice of primary care providers informing their patients on safe asthma practices, evidence shows that it reduces the number of asthma attacks and improves quality of life when school nurses provide a hands-on demonstration of inhaler use and identification of child-specific triggers.



(Centers for Disease Control, 2019)

Evaluation

Decreased number of asthma attacks at school measured as incidence over a school year.

References

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