

Increasing Measles, Mumps, and Rubella Immunization Rates in a Pediatric Primary Care Setting: A Translational Project

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Abstract

Aim: The aim of this project is to improve the uptake of the measles, mumps, and rubella (MMR) vaccine in medically eligible children whose parents initially made the choice to not vaccinate their children. Current research regarding the efficacy of the MMR vaccine will guide the implementation of a community outreach initiative.

Methods: A quality improvement methodology guided the implementation of this project. The researcher designed evidence-based surveys for providers, staff, and parents. Brief educational one-on-one sessions were conducted between the researcher and providers and staff on two different occasions. The results of the surveys additionally guided evidence-based education to both empower the providers and educate the parents. The practice guidelines and the educational component both adhered to current (Centers for Disease Control and Prevention (CDC) practice guidelines for MMR counseling and administration.

Results: A convenience sample of fifteen providers and staff participated in the study and 372 parents voluntarily completed and returned surveys. Statistical analyses was conducted on all data collected using descriptives, frequencies with percentages, and crosstabulations.

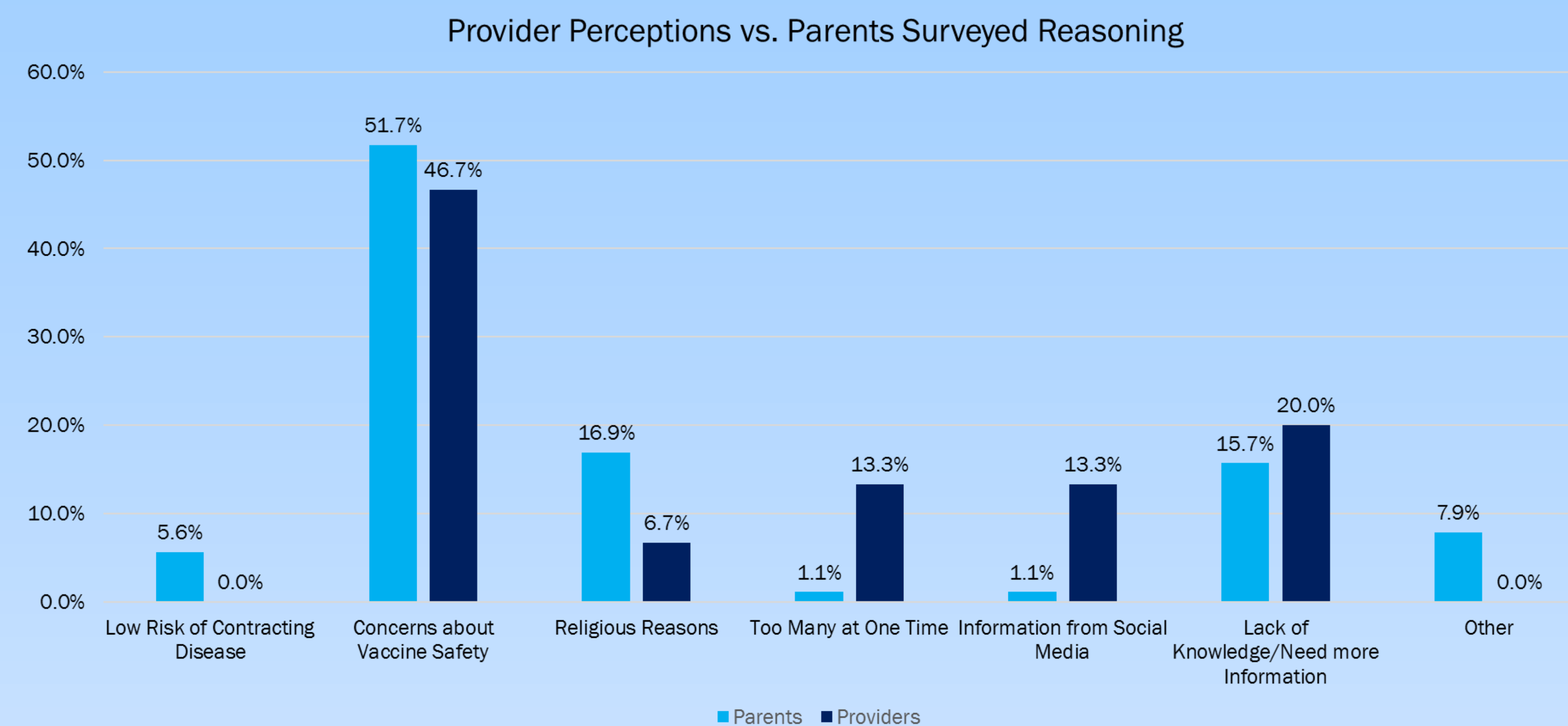
Conclusion: Increasing parental knowledge related to the efficacy and safety of the MMR vaccine could be effective in reducing the number of local unimmunized children.

Keywords: barriers to vaccination and MMR vaccine, vaccine hesitancy, barriers to immunizations, antivaxxers and MMR vaccine, decision making, vaccination beliefs, and MMR vaccine.

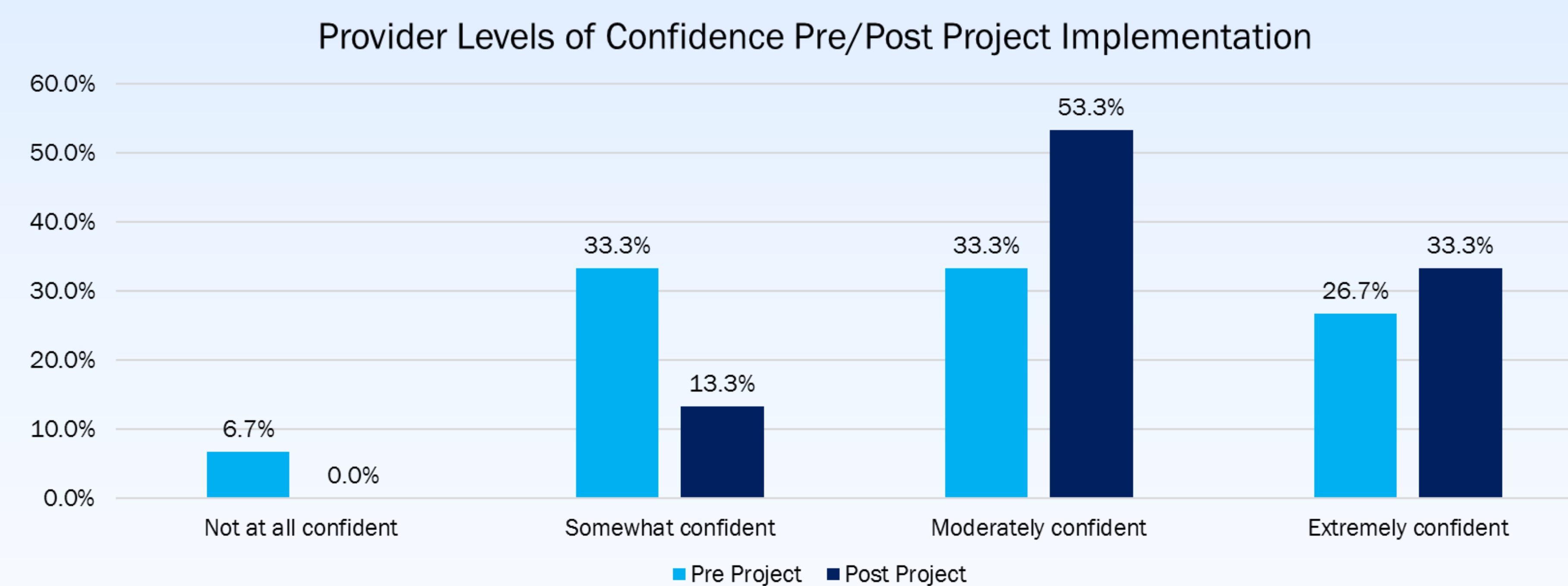
Purposes

- Identify major reasons and barriers that contribute to parents' choice not to vaccinate their children with MMR vaccine.
- Implement an evidence-based immunization initiative to increase the uptake of the MMR vaccine among medically eligible children.

Findings



- Concern with vaccine safety led provider perceptions and parents' reasoning for not vaccinating against measles (See above chart).
- Provider and staff levels of confidence showed substantial increase after receiving knowledge of surveyed results (See below chart).
- Based upon parent survey results:
 - 23.9% does not vaccinate with the MMR vaccine,
 - 37.1% do not know of anyone that has suffered a serious side effect from the MMR vaccine,
 - 44.9% would consider vaccinating in the future.



Background and Significance

- 1,282 cases of confirmed measles in the United States in 2019 (CDC, 2020).
- "Reductions in MMR vaccine coverage...would likely result in thousands of annual measles cases" (Lo and Hotez, 2017, p. 891).
- Over a 68.81% increase of measles from 2018 to 2019 (CDC, 2020).
- When parents do not receive proper education from their providers "they seek information from other sources that can potentially mislead and misinform them, causing them to make poor choices for their children" (McKee and Bohannon, 2016, p. 108).

Methods

- Providers and staff participated in a survey of perceived parental barriers of the MMR vaccine and their confidence in discussing the benefits of the vaccination in non-vaccinating parents.
- Parents of both immunized and unimmunized children participated in a survey addressing reasons behind accepting/rejecting the vaccine, intent to vaccinate in the future, and willingness to receive further evidence-based education.
- Results of the surveys empowered providers with the knowledge to direct conversations with parents initially choosing to not accept the MMR vaccine and guided a focused evidence-based educational component for distribution to parents at the clinical site.

References

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