

## INTRODUCTION

In the health care setting, there is the ever present risk of transmitting disease causing micro-organisms. These may be spread through contact with health care workers and objects in the environment. As a result of this, the Center for Disease Control (CDC) has recommended the implementation of contact precautions (CP) in the health care setting in an attempt to curb the spread of pathogens<sup>1</sup>. Patients are placed on CP if they are known or suspected to carry multidrug-resistant organisms/some specific disease causing enteric microbes<sup>1</sup>.

Health care personnel are required to wear gloves and gowns before entering their rooms of patients on CP. Unfortunately, data has emerged that suggest that patients under contact precautions may be more prone to non-infectious adverse events in the hospital which include increased symptoms of depression and anxiety and decreased patient satisfaction with care<sup>2</sup>. Even more, a recent study revealed that a large percentage of patients under contact precautions at a tertiary hospital did not know why they were placed under CP<sup>3</sup>.

## OBJECTIVES

To improve patient satisfaction with the quality of education provided about CP by at least 30% by the end of 7 months. Through the provision of a standardized patient education sheet to hospitalized patients placed on CP within their first 24 hours being placed under contact isolation.

## METHODS

This study was executed in two phases at the Abington Hospital (AH) from April 2017- February 2018. Patients under contact isolation were randomly selected to participate in the study. The first phase of the study ran for 4 months and 100 patients participated. During this arm of the study, patients placed under contact precaution received a standardized questionnaire that determined both their satisfaction with the quality of education provided about contact precautions and also their satisfaction with the quality of health care provided by the hospital.

The second phase was the intervention arm and lasted for 7 months in which 74 patients participated. During this phase, participants received a standardized education sheet on contact precaution within the first 24 hours of being placed under isolation precautions. The educational sheet was in lay mans terms and contained information regarding the rationale behind initiating CP and what things to expect while on CP. Respondents in phase 2 also subsequently received the same standardized questionnaire administered in phase 1. Stake holders that were consulted and involved in this study included: the hospital epidemiology team, nursing, Internal Medicine resident Physicians (who administered the questionnaires and educational sheets) and a research coordinator.

## RESULTS

Comparison of data from the two phases of the study revealed that the more people in the intervention arm of the study indicated that they strongly agreed to having a clear understanding of why they were placed on CP (75.4% vs 35.6%, p value < 0.01).

When compared with phase 1, more patients in phase 2 expressed satisfaction with the overall quality of education provided by the health care delivery team regarding CP (71% vs 35%, p value <0.01).

A greater proportion of ore patients in the intervention arm expressed a strong satisfaction with the quality of health care provided in the hospital (71.0% vs 61.8% in phase 1 , p value = 0.028).

In the intervention arm of the study, a question structured to ascertain whether the respondents found the education sheet provided beneficial was included in the questionnaire. This was a balancing measure put in place to ensure that the information provided in the educational sheet was not perceived as redundant, confusing or irrelevant. Seventy-nine percent of the respondents agreed that the intervention provided was helpful.

## CONCLUSION

Providing standardized educational sheets on CP to hospitalized patients placed on isolation precautions is a time effective, easily implementable and cost effective way of improving both patient's satisfaction with care and understanding of CP.

## REFERENCES

1. Siegel JD, Rhinehart E, Jackson M, Chiarello L and the Healthcare Infection Control Practices Advisory Committee. 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. Retrieved May 28<sup>th</sup> 2018 at 19:32 from <https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html>
2. C. Abad, A. Fearday, N. Safdar. Adverse effects of isolation in hospitalized patients: a systematic review. Journal of Hospital Infection. Volume 76, Issue 2, 2010. Pages 97-102. ISSN 0195-6701. Available online at <https://doi.org/10.1016/j.jhin.2010.04.027>.
3. E. Edosio, H. Barry, Z. Arif. Contact Precautions- Does it affect patients perception of health care provided? Drexel Med Journal. Volume 12, 2018. Pages27-31.

## PDSA CYCLES

### PHASE 1

#### PLAN:

- \* Aims/Objectives were elaborated
- \*Stakeholders were identified
- \*Data collection questionnaire was designed to assess patient experience with CP.
- \*IRB approval was obtained

#### ACT:

The decision was made to implement an intervention with the aim of bridging identified the educational gap.

#### STUDY:

Data was analysed and revealed that a vast majority of patients indicate that they did not receive any notification or education before being placed on CP.

#### DO:

- \* Hospital wide lists of patients under CP was created.
- \* Questionnaires were administered within the first 24hrs of initiation of CP.

### PHASE 2

#### PLAN:

- \* A standardized educational sheet on CP was created.
- \* IRB approval was obtained.

#### ACT:

\* The recommendation was made to implement the provision of standardized educational sheet to patients under CP as a means of improving patient experience.

#### STUDY:

- \* Data obtained was analyzed in comparison to the data obtained from phase 1.
- \* There was a statistically significant improvement in patient's satisfaction with the quality of education provided.

#### DO:

- \*The educational sheet was administered to randomly selected patients on CP.
- \* The standardized questionnaire was subsequently administered.