

USING CASE CART TO IMPROVE THE TIMELINESS OF SURGICAL INSTRUMENT COLLECTION

*Fu-Ling Chan,¹ Mei-Chin Huang,² Mei-Kuan Lin,² Jui-Chun Hsu,² Li-Chin Tsai,³

¹Operating Room, Assistant Head Nurse, ²Operating Room, Registered Nurse, ³Nursing Department, Nursing Supervisor, Chang Gung Memorial Hospital, Yunlin, Taiwan

INTRODUCTION

The instruments required for surgery are important tools in performing the surgery. Once a leak occurs, it may affect the operation, prolong the operation time, expose the surgical site for too long, and delay the operation schedule. This leads to problems related to medical safety, cost increase, and patient safety. In order to make the operation nurses and equipment preparers work effectively, it is necessary to optimize the related operations to reduce the time-consuming of preoperative preparations.

METHOD

After analyzing the current situation, the following strategies are formulated: 1. Establish a computerized selection system for “surgical instrument package list”: provide personnel to use it when performing the operation and collection of surgical packages; 2. Add “CASE CART” special vehicles: increase the convenience of the preoperative preparations performed by the specialized surgical nurse.



The Surgical instrument package list



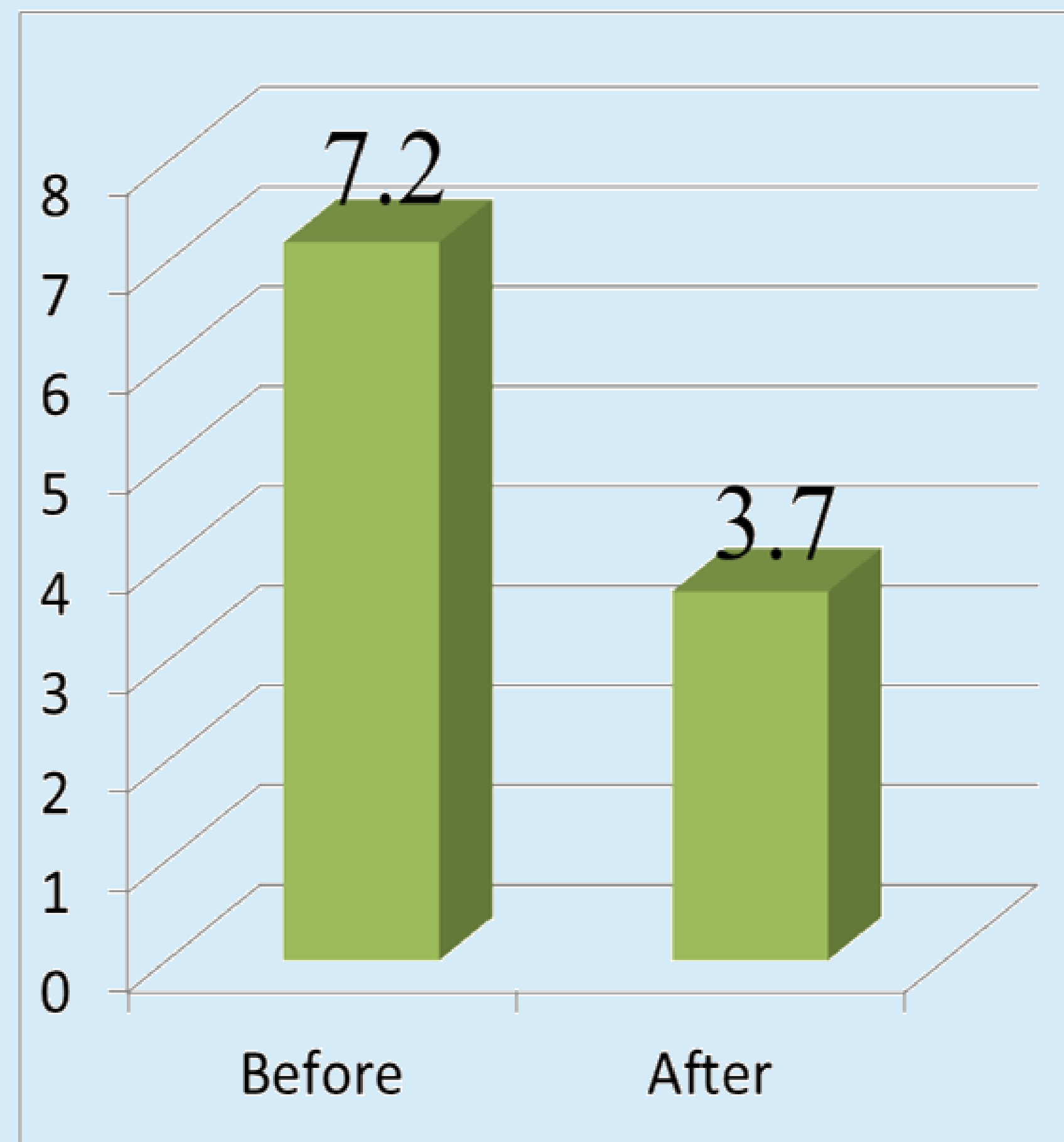
Filling Surgical instrument package



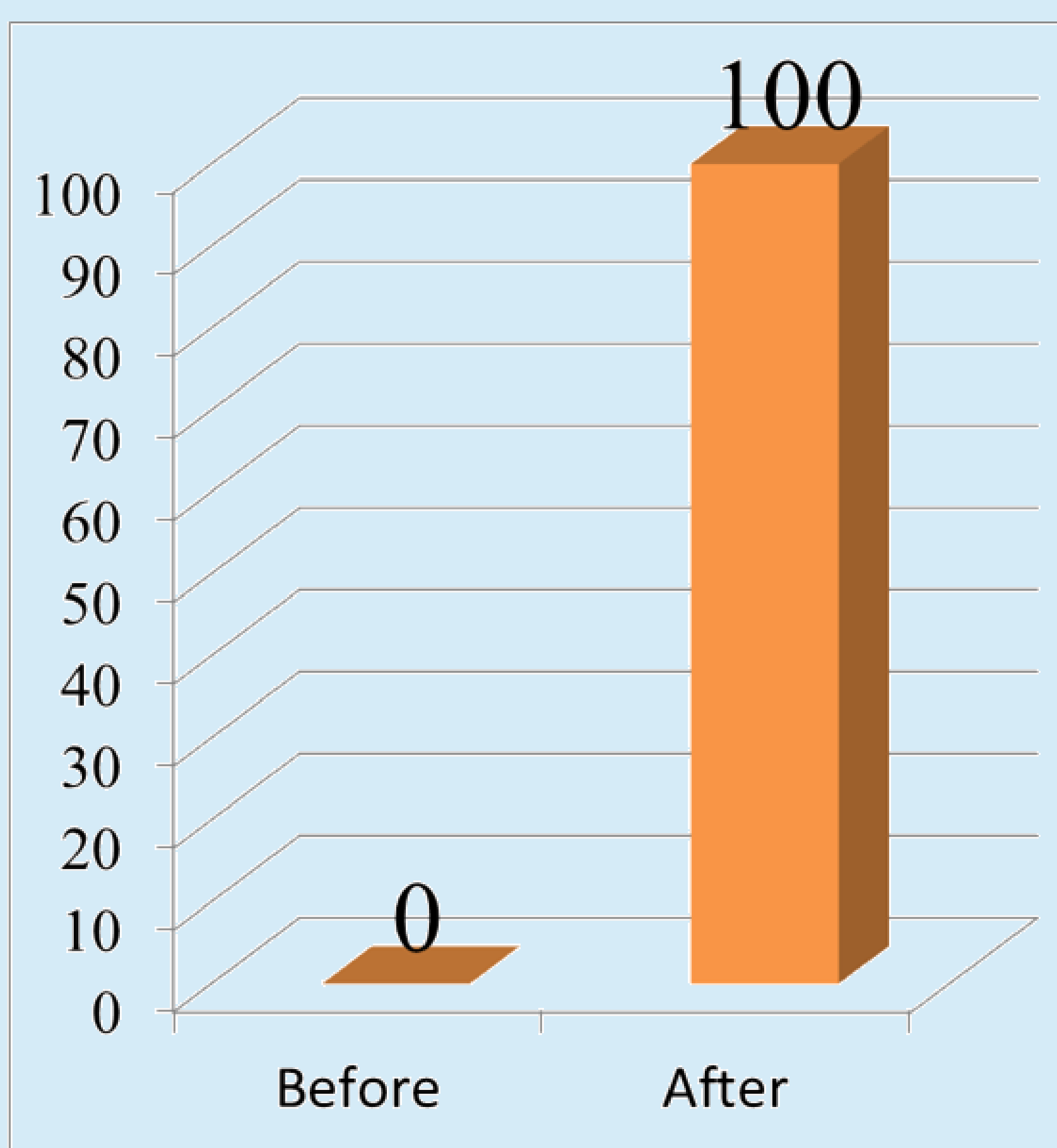
CASE CART Complete

RESULTS

- After the implementation of relevant strategies, we found that
- (1) The time taken by surgical nurses to collect surgical items after using "CASE CART" decreased from 7.2 minutes to 3.7 minutes.
 - (2) The information transmission accuracy of the items prepared by the computer is 100%.
 - (3) The correctness of the items prepared by the equipment preparer is 100%.
 - (4) The error or omission rate of surgical instruments is 0%;
 - (5) The satisfaction rate of the strategy is 100%.



The bar chart of the average processing time(minutes)



The bar chart of equipment correctness limit(%)

CONCLUSIONS

In order to make the operation nurses and equipment preparers work effectively. The following strategies can be carried out, which can specifically simplify the overall operation process and improve the accuracy and consistency of the operation of the surgical disk package.

Introduce the use of "CASE CART" to increase the convenience of preoperative preparation for surgical nurses and equipment preparers. It can reduce the workload and load, improve the efficiency of surgical package distribution, and promote the management of monitoring the safety of patients' surgical materials, thereby comprehensively improving the safety of the operating room.