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A project to reduce the risk of chemotherapy
extravasation form Port-A catheter



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INTRODUCTION

Many emerging treatment methods have been developed for cancer treatment. Chemotherapy is the main treatment method at present, most commonly done with intravenous injection. In order to avoid discomfort and complications caused by repeated vein punctures in cancer patients, physicians often advise patients to place Port-A (Chang et al., 2015). Because Port-A is implanted subcutaneously and one end of the catheter is placed in the superior vena cava, once chemical drug extravasation occurs, the patient has been seriously injured before its discovered, causing local tissue damage, increased hospitalization costs, and may lead to potential legal issues such as accusation of medical malpractice (Taxbro et al., 2019). According to research, the incidence of extravasation of chemical drugs is about 0.1%-6.0% (Firat, Hiba, & Nagi, 2016). Therefore, it is important that educate patients to improve their knowledge of Port-A.

From January 1, 2020 to December 31, 2020,The extravasation rate is 0.39% in our unit, resulting in increased hospitalization days, severe pain at the injection site, and various injuries such as appearance deformation. Unawareness of the teaching leaflets meant for assisting the usage leads to improper cognition of patients. According to relevant statistics in 2020, patients awareness of safety care about chemotherapy knowledge rate is 86.3%.

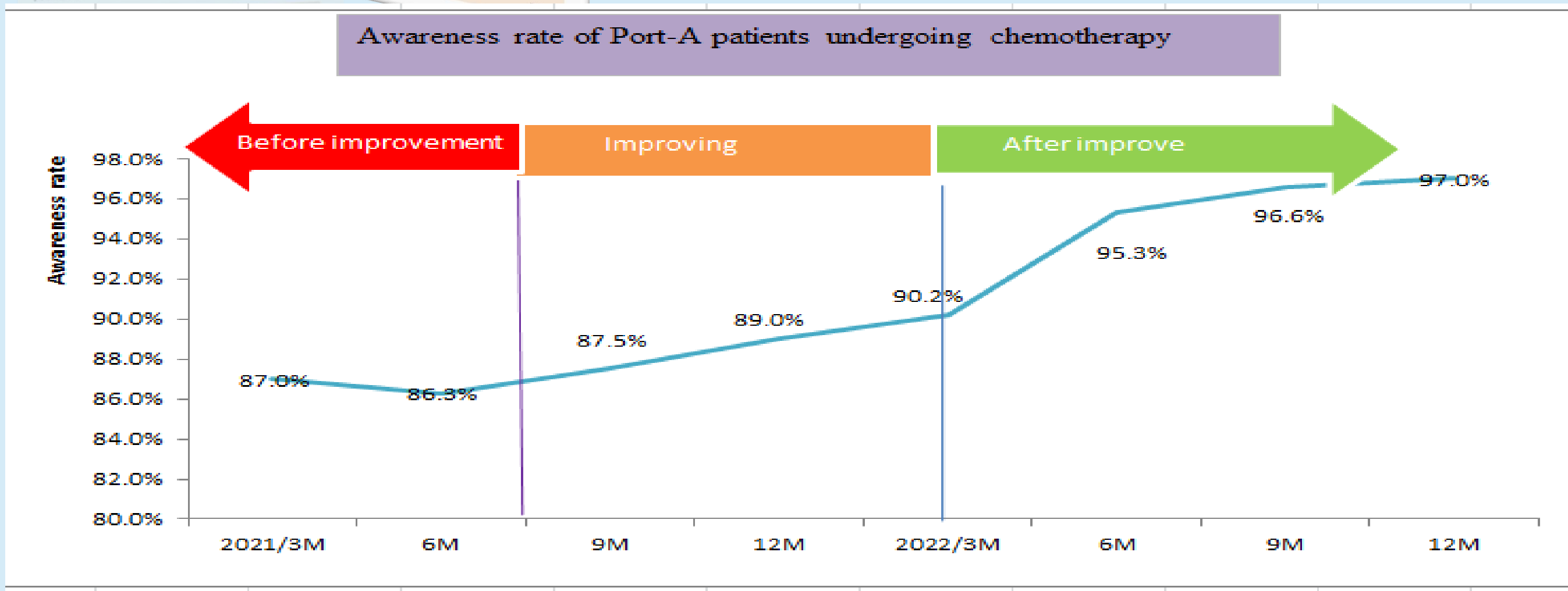
AIM

The aim is to decline the risk of chemotherapy extravasation form Port-A catheter.

RESULTS

After the implementation of the project , from July 2021 to September 2022 , **no incidents** of drug extravasation occurs during Port-A chemotherapy.

In addition, after the implementation of the project , the patient's awareness of Port-A has increased from 86.3% to 96.6%.



METHOD

From January 1, 2021 to June 30, 2021, a special task group was formed to collect the current situation and analyze the causes, raise the issues and improve PDCA. Measures for improvement include:

- 1.Encourage utilization of the leaflets by nurses in educating patients
2. Provide QR code of the health education leaflet and place it on top of the work cart for use
3. For every six months, the quality control team checks the nursing staff's cognition and skills of Port-A care
4. Quarterly evaluates chemotherapy patient's awareness of Port-A during chemotherapy.

CONCLUSIONS

Extravasation of chemical drugs will cause serious injury to patients, and also affect the daily life and quality of life of patients. It will also cause great psychological pressure on the nursing staff who perform chemotherapy. Due to the increasing needs of patients for disease care, medical staff should continue to enrich the knowledge and skills related to chemotherapy, and provide health education so that patients and their families can have a correct understanding, and it is also extremely important to prevent the occurrence of extravasation.

During the implementation of the project, each nurse fully cooperated and supported the project, and maintained the safety of patients with the strength of the team, which made the project effective and provided the greatest assistance in the implementation of the project. During the implementation process, some colleagues complained that they were busy with clinical work and neglected health education, which was a major resistance, but after gentle persuasion and repeated explanations, they could accept and cooperate, understand the causes and preventive measures of chemotherapy drug extravasation, and use the Port-A correctly, reducing the harm of extravasation to the patient.

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