Improving palliative care utilization through a quality control circle approach

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Background: Palliative care is a crucial component of today's healthcare infrastructure. Over the past ten years, there has been a noticeable increase in Taiwan's need for palliative care due to the country's rapidly aging population. Palliative care encompasses a comprehensive, inter-disciplinary healthcare team that strives to provide physical, psychological, and spiritual comfort for patients and their families while also minimizing distressing symptoms. The goal of the QCC project is to improve the utilization and consultant of palliative care for patients with cancer and non-cancer illnesses by streamlining the referral process and strengthening the bond between clinical physician sand the palliat -ive care team.

Methods: In this project, a quality control circle (QCC) was formed. A retrospective investigation of patients with serious illnesses between 2018 and 2021 who were not referred for palliative care within the six months prior to their passing. Using a fishbone diagram, multiple strategies were developed to address the obstacles and possible issues. The application of QCC has improved the use of palliative care. It aims to increase the number of medical profess -ionals by raising their level of understanding of identifying and resolving medical issues and enhancing the settings for palliat -ive care.

Results: Three major actions were implemented in this project included redefined the criteria of palliative care procedure, training and improving physicians and nurses of the palliative care, and enhancing and maintaining food communication between intensive care units palliative care center. The rate of referral patients was increased from 62.2% to 69.4% in 3 months. The test score on comprehensive the referral procedure and palliative care were increasing and the referral patient number to palliative care also increased.

Conclusion: This project focused on three main strategies: (1) promoting communication and shared decision-making, (2) increasing education and awareness, and (3) providing technical support and integrating medical care. It is crucial to encourage communication among healthcare professionals, patients, and families, everyone in this care system can have a better understanding to develop a comprehensive palliative care plan for patients.

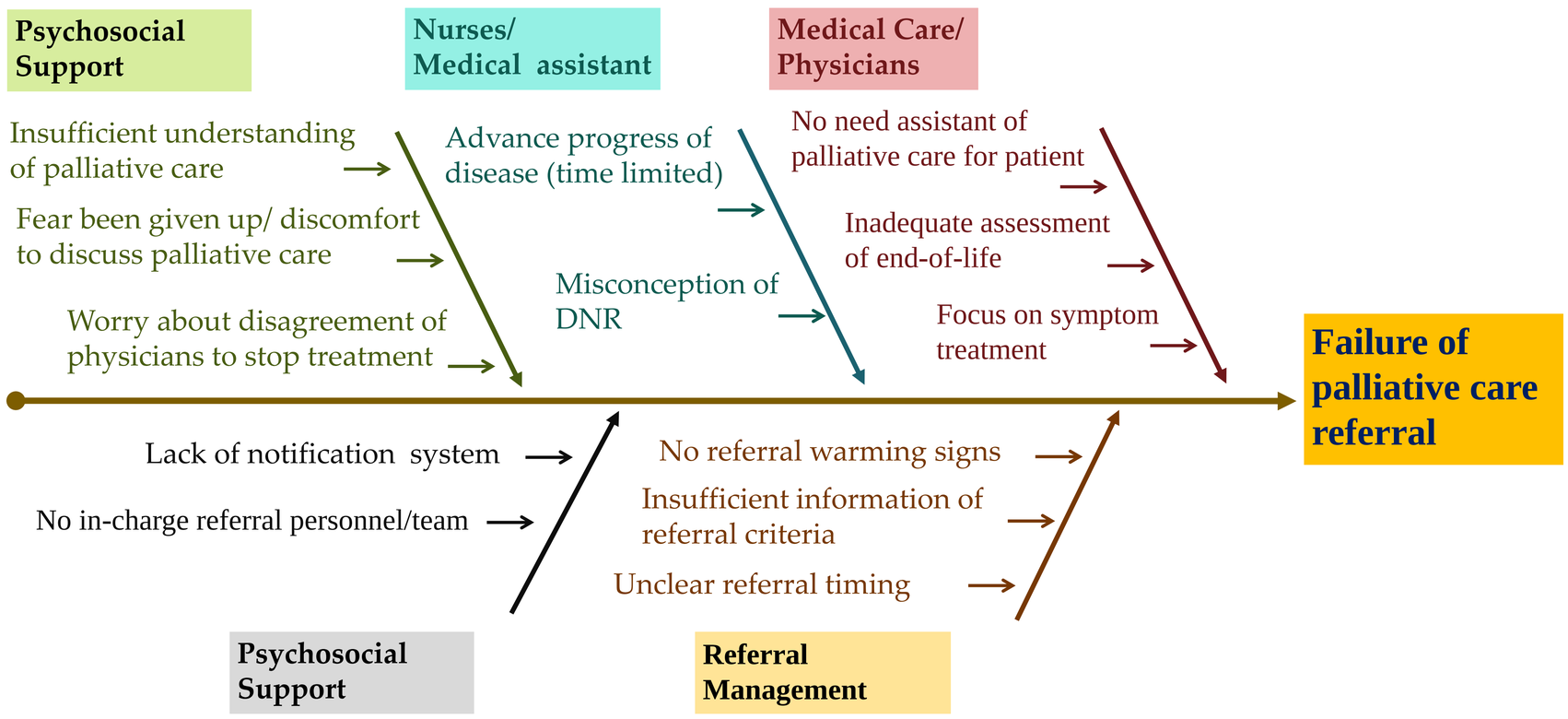

Figure 1 Fishbone analysis diagram.

Table 1. Nine members of the QCC team use the "5, 3, 1" point scale metric to evaluate the validity, exigency, and capability to evaluate the actions strategies.

No	Major failure cause	Strategy	Validity	Capability	Exigency	Total Score	Action decision
1	Referral timing is unclear of non-cancer relative disease	1.1 Establish referral guildline and procedure	35	39	37	111	P
		1.2 Design a new referral assessment tool	31	17	25	73	
		1.3 feedback the un-referral cases to each wards	15	25	19	59	
2	Unclear clear definition of end stage of non-cancer	2.1 On job training course of non-cancer relative palliative care	35	25	35	95	P
		2.2 Design the simulation scenario	31	39	27	97	
		2.3 Declear the non-cancer relative palliative care guildline	15	17	19	51	
3	Lack awareness to consult palliative care	3.1 On job tranining meeting for ICU staff	31	41	33	105	P
		3.2 Declear the palliative care service during staff meeting	35	27	31	93	
		3.3 Remind physicians during the rounds	15	13	17	45	
4	Focus on disease control in intensive care but not palliative care	4.1 Comprehensive consultation when a patient transfer to ICU	29	25	21	75	P
		4.2 Periodically evaluation of patient's condition	21	27	25	73	
		4.3 Establish referral guildline and procedure	31	29	35	95	
5	Lack of notification system	5.1 Referral to family medicine when patient was going to sign DNR	25	25	29	79	P
		5.2 Establish a Line APP mobile application for referral notification	35	27	35	97	

Table 2. Monitoring outcomes before and after implement the action strategy.

No	Major failure cause	Actions Strategy	Measurement Index	Outcome measurement	
				Before implementation	After implementation
1	Referral timing is unclear of non-cancer relative disease	Establish referral guideline and procedure			referral guideline proofed
2	Unclear clear definition of end stage of non-cancer	1.On job training course of non-cancer relative palliative care	Palliative care proficiency	74.5	94.6
		2.Design the simulation scenario			
3	Lack awareness to consult palliative care	1.On job training meeting for ICU staff	Course participation rate		100%
		2.Symposium for palliative care	Palliative care proficiency	81.2	96.5
4	Focus on disease control in intensive care but not palliative care	Establish referral guideline and procedure			referral guideline proofed
5	Lack of notification system	Establish a Line APP mobile application for referral notification	Referral patient number Referral rate (%)	8.8 patients/month 62.2%	13 patients/month 69.4% (3 month)

Furthermore, standard guidelines should be established to identify and screen patients who could benefit from palliative care and ongoing training for medical team to bolster their understanding and proficiency in delivering palliative care. Using notification technology in healthcare processes can also increase awareness of palliative care for medical care staffs throughout the entire medical landscape.