

PHARMACY SERVICE DEVELOPMENT IN THE COMMUNITY: THE IMPLEMENTATION OF PHARMACY AUTOMATION IN THE REHABILITATION SETTING

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JOCKEY CLUB REHABILITATION COMPLEX
TUNG WAH GROUP OF HOSPITALS



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CONTENTS

- Current situation of medication management in the rehabilitation setting and old-aged homes
- The Centralised and Computerised Medication Management System (CCMMS) at the Jockey Club Rehabilitation Complex (JCRC)
- Role of pharmacist in the rehabilitation sector
- Future service developments



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OVERVIEW OF CURRENT SITUATION



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OVERVIEW OF CURRENT SITUATION

- Insufficient pharmacist participation in old aged homes and rehabilitation setting
 - Pharmacists are available as visiting basis only; lack of in-house pharmacist
 - Lack of pharmacist involvement in special populations e.g. mentally challenged service users



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OVERVIEW OF CURRENT SITUATION



Date Start 開始時間	Drug 現服藥物	Dosage 劑量	Freq. 次數	Route 途徑	Source 處方來源	Date			
						Time	1	2	3
16.4.2018	Sulpiride 50mg	100mg (2 cap)	NOCTE (BEDTIME)	P.O.	WPC	08:00			
						12:00			
						17:30			
					VPS2	21:00			
16.4.2018	Diazepam 5mg	5mg (1 tab)	NOCTE (BEDTIME)	P.O.	WPC	08:00			
						12:00			
						17:30			
					VPS2	21:00			



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OVERVIEW OF CURRENT SITUATION

健康
視窗

囤積千粒記性差 長者隨時食錯藥

【本報訊】「年紀大，機器壞」，身患多種慢性病的長者，每日要服多種藥物，家中可能囤積逾千粒藥，隨時「食錯藥」引致不必要副作用，甚至致命！多個藥劑師團體近年推出針對安老院舍長者的「藥劑師到訪服務」，由藥劑師協助長者整合藥物及調整劑量，自二〇一〇年起，已服務逾百間院舍，逾一萬名長者受惠。

香港醫院藥劑師學會會長崔俊明表示，不少長者到公立醫院門診覆診時，會一次獲發半年藥物，動輒逾千粒，不論長者或安老院舍職員都難以掌握藥物類別及服用劑量。「好多長者會睇勻普通科，專科同私家醫生，好多藥都重覆到，拿到四科求醫，就全藥都重覆到，好容易食錯藥，甚至食錯藥到死。」

復，尤其止痛藥，食太多會傷胃。」他指出曾有患思覺失調的安老院長者，因服藥過量引起肌肉及行動受阻問題。

藥劑師到訪「執靚」藥單

香港醫院藥劑師學會、香港執業藥劑師協會及香港藥學會等多個組織，二〇一〇年起推出藥劑師到訪服務，由藥劑師直接到安老院詳細了解及整理長者所服的藥物。曾受訪的一萬名長者中，八成需要整合藥物，即找出重複藥物、分辨不同藥物、「執靚」每日服藥藥單等，另有六成人須調整藥物劑量。

有社區藥劑師指，不少長者不按時服藥及自行減藥，除影響病情，亦愈儲愈多藥。藥劑業界促請當局增加社區藥劑師培訓及宣傳，讓藥劑師走進基層，日後長者有藥物疑難，到就近藥房已可詢問藥劑師。

愈多藥。藥劑業界促請當局增加社區藥劑師培訓及宣傳，讓藥劑師走進基層，日後長者有藥物疑難，到就近藥房已可詢問藥劑師。

安老院舍分錯藥 15%劑量不符

安老院舍長者服藥過量不自知，尤其常見於止痛藥。香港醫院藥劑師學會聯同藥業組織指出，透過成立藥劑師到訪服務，發現院舍中15%藥物劑量不符，需致電醫生確認，提醒用藥過量可導致副作用。

記者：黃琳

香港醫院藥劑師學會會長崔俊明說，曾有一名患上思覺



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THE SITUATION AT JOCKEY CLUB REHABILITATION COMPLEX (JCRC)



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WHAT ABOUT JCRC?

- Service scope of Jockey Club Rehabilitation Complex (JCRC):
 - Over 1000 service users
 - Distributed among 18 service units according to demographic characteristics
 - Mentally challenged cases
 - Visually impaired senior citizens



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WHAT ABOUT JCRC?

- Previously, nursing team are responsible for ...
 - Updating medication profile upon follow-ups or consultations
 - Preparing medications for individual service users according to their medication profiles and corresponding administration times
 - Administering medications and recording on paper drug charts



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WHAT ABOUT JCRC?

- The previous medication management process is:
 - Labour-intensive
 - Time-consuming
 - 9 – 10 nursing manpower equivalent / day spent just on medication management
- Less time could be allocated for bettering care to service users



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WHAT ABOUT JCRC?

- Motivations to improve the current situation via automation and participation of in-house pharmacist
 - Pharmacist can provide consultation and reconciliation to medication profiles of service users
 - Pharmacist can ensure medication management is up to standard
 - Nursing staff can better focus on providing direct care to service users



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WHAT ABOUT JCRC?

- Motivations to improve the current situation via automation and participation of pharmacist
 - Large case load facilitates implementation of Centralised and Computerised Medication Management System (CCMMS)
 - Improve standard of practice with technological advances
 - Recent models on automation inspires improvisation



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THE NEW ERA OF PHARMACY SERVICE



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THE NEW ERA OF PHARMACY SERVICE

- Extend pharmacy service from traditional sectors to rehabilitation settings
- Get in touch with special populations with great need of pharmacy service
- Serve as a role model of mega-sized long-term care facility with in-house pharmacy services



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THE NEW ERA OF PHARMACY SERVICE

- Utilise current automation technologies on medication management
 - Automatic dispensing machine to pack medications into multi-drug pouches according to drug-taking habits of service users
 - Pouch checking machine to alleviate manual checking stress
- Minimise manual workload and human errors during manipulations



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THE NEW ERA OF PHARMACY SERVICE

- Actively participate in the development of a close-loop medication administration and pharmacy system
 - Input and update medication profiles
 - Verify drug order entries by pharmacist
 - Generate refill orders to packaging machines for mealtime pouch packaging



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OTHER ROLES OF PHARMACIST



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ROLE OF PHARMACIST IN THE REHABILITATION SETTING

- Oversee the use of automated re-packaging systems according to guideline requirements
 - Enable robust traceability on medications to be packed to each pouch
 - Pack pouches according to drug rounds instead of unit packs / doses
 - Handle high risk medications e.g. dangerous drugs manually instead of packing through canisters
 - Screen pouches by checking machines and pharmacist verify flagged pouches



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ROLE OF PHARMACIST IN THE REHABILITATION SETTING

- Devise and implement medication supply workflow
 - Repackaging of medications into mealtime pouches according to administration times of individual service users
 - In-house medication distribution via regular refills
 - PRN medications supply on request via pharmacy system



ROLE OF PHARMACIST IN THE REHABILITATION SETTING

- Reconcile pharmacotherapy in special populations
- Provide training to nursing staff on enhancing drug knowledge
- Provide health promotion to residents / care-givers



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WHAT WOULD BE IN THE FUTURE?



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WHAT WOULD BE IN THE FUTURE?

- For JCRC:
 - Extend CCMMS to all 18 service units
 - Promote JCRC as a landmark of rehabilitation pharmacy service



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WHAT WOULD BE IN THE FUTURE?

Exploring

- For the Southern District community:
 - Expand CCMMS to other nearby old aged homes / rehabilitation centres under TWGHs
 - Serve community-dwelling geriatric citizens by providing mealtime medication pouches via elderly outreach and home care service teams



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WHAT WOULD BE IN THE FUTURE?

- For the pharmacy profession:
 - Perform practice-based research on prescribing patterns and medication-use habits in special populations
 - Nurture future pharmacists-to-be
 - Promote practice changes in medication management in the local community



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TOGETHER WE CAN MAKE A DIFFERENCE



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Thank you!



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