

susceptibility reports and drug-resistant analysis. As an expectable consequence, the spread of the disease would be better managed.

Methods: Root cause analysis (RCA) approach was applied ; through joint discussion conference, from timeline, fishbone, cause & effect diagrams, to eventually figure out the key systematic problem which induced delay of previous report. Improvement strategies were thus offered. We took 「The achieving rate of drug susceptibility test completed within 28 days」, designated by Taiwan CDC to routinely monitor practice quality in 32 national TB accredited laboratories, as an improvement indicator. Besides, annual drug-resistance ratio of new infected populations was also analysed.

Results: In terms of reaching rate, about drug susceptibility maximal 28-day report, the number was raised from 21.4% to 90.4% via RCA implementation. 112 new infected patients emerged annually, with 17.5% drug-resistant to first generation therapy. Among these cases, 2 cases showed inconsistency with drug susceptibility result between specimens from different sites.

Conclusions: Indicator reached for the threshold value 90%, showing significant improvement. The drug-resistance rate of new patients was higher than the average rate in Taiwan (14%, Taiwan CDC, 2013). We hope the study could provide valuable information of medication to the clinicians and benefit to prevent and control tuberculosis disease.

PS 1-221

EFFECTIVENESS OF TUBERCULOSIS CASE MANAGEMENT

Yen-Ping Tsai. *Nursing Department, Cathay General Hospital, Taipei, Taiwan*

Purpose: World Health Organization (2013) gold tuberculosis report has shown tuberculosis (TB) remains a major global health problem. In 2012, an estimated 8.6 million people incident TB cases, 1.3 million TB deaths, The current anti-TB drugs can be effective in the treatment of tuberculosis, thus taking immediate early diagnosis and treatment is very important, the purpose of this study was Through the intervention case manager can effectively manage directly observed treatment (DOT) rate and Completed treatment rate within 12 month.

had one-on-one meetings and psychosocial issues support with nursing case manager. The primary endpoint of this study is the DOT rate and completed treatment rate.

Results: In this study, 134 cases were enrolled, 73 (54.48%) were males and 61 cases were females. The average age were 57.3 years, TB diagnoses included Pulmonary TB (n=98, 73.13%), extra-pulmonary TB (n=36, 26.87%). sites of extra-pulmonary TB involves contain pleura, lymph nodes, skin, joint and bone, meninges, Pericardium, genitourinary and laryngeal. Further, the DOT rate of 95.33%, and the completed treatment rate of 98.45% within 12 months.

Conclusions: TB Case Management can effectively manage DOT rate and completed treatment rate within 12 months, this experience can be applied to other diseases to help patients complete treatment.

PS 1-222

SURVEY OF THE STATUS QUO OF TB INFECTION OF MEDICAL PERSONNEL IN INFECTIOUS DISEASES HOSPITAL

Xian-Li Zhao^a, **Xiao-Long Li**^a, **Feng Zhou**^b. ^a*Henan Provincial Infectious Disease Hospital, Zhengzhou 450001, China;* ^b*Chinese Academy of Medical Sciences, Beijing 100005, China*

Purpose: To study the status quo of TB infection of medical workers in the infectious diseases hospital, and explore the risk of TB infection of medical workers in the infectious diseases hospital.

Methods: Cluster sampling method was used in this study, and all the medical workers in the infectious diseases hospital were interviewed by a structured questionnaire and purified protein derivative (PPD) test.

Results: Education level, job title, living conditions, working time in TB clinics or wards are the risk factors for TB infection, personal protection is a protect factor for TB infection. The TB infection rate of the staff members in this infectious diseases hospital was 48.18%, while the incidence of TB was 0. Differences of TB infection for medical workers in different departments was not statistically significant ($P > 0.05$), while differences of TB infection for medical workers in different working years, age, and job title was statistically significance ($P < 0.05$).

Table 1 Results of multivariate logistic regression analysis (PS 1-222).

Variable name	β	SE	Wald χ^2	γ	P	OR	95%CI	
							L	U
Educational level	0.528	0.256	4.243	1	0.039	1.695	1.026	2.802
Job titles	0.665	0.292	5.174	1	0.023	1.945	1.096	3.449
Current living conditons	0.610	0.295	4.266	1	0.039	1.840	1.032	3.280
Working time in TB clinics and wards	0.867	0.269	10.359	1	0.001	2.380	1.404	4.035
Protective score	-0.084	0.039	4.715	1	0.030	0.920	0.853	0.992

Table 2 Studies of TB Infection conditions in 384 medical workers (PS 1-222).

Item	Total No.	Infected No.	Infection Rates	χ^2 Value	P Value	
Departments	TB Dept.	57	29	50.88	10.65	0.102
	Medicine Dept.	158	66	41.77		
	Surgery Dept.	36	21	58.33		
	Specimen Exam. Dept.	29	17	55.17		
	Radiology & Function Dept.	12	9	75.00		
	Pharmacy	20	7	35.00		
	Dept. of Administrative & Logistic Management	72	37	51.39		
Work Time Experience	\leq 5 years	169	55	32.54	31.53	0.001
	$>$ 5 years	215	132	61.40		
Age	$<$ 30 years old	200	75	37.50	19.06	0.001
	\geq 30 years old	184	110	59.78		
Job Title	Junior tiles and below	268	111	41.42	16.23 16.234	0.001
	Intermediate and above	116	74	63.79		

Methods: This study was of a cross-sectional design. Participants were TB patients who have received case management in a medical center in Northern Taiwan from January 2011 to December 2012. Each of the TB patients

Conclusions: Medical workers in the infectious diseases hospital are at high risk of TB infection. They should strengthen their self-protection consciousness, and take protective measures as early as possible.