Early Intervention for Students with Mental Illness in Taiwan

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Thanks for inviting me. I am very happy to be here to share our work, for early intervention for mental health in Taiwan. There are two very important issues. One is national health insurance which now covers 99% of the 23 million Taiwan's population. The other important issue is an important law regulation. Currently in Taiwan, each university or school having students number more than 1,200, one psychologist or social worker should be hired to take care of the student mental health. If you have 12,000 students, you should have ten. Thus it is very fundamental for us to promote mental health in the community, particularly in the schools. In high schools we use 12 to 24 classrooms as one unit.

School Mental Health

Here I would like to share two models. The first model is to improve quality of our mental health care for high schools, middle or elementary schools. In the early years we could not find very good mental health prevention programme or good communication between hospitals and schools, because psychologists used to sit in their counselling rooms waiting for a client/student to knock on the door and ask for help. That was very traditional. When we enacted this kind of law regulation, our government put a special program for our students. We created outreach teams including a child psychiatrist, a clinical psychologist and a case manager. When we are very familiar with this kind of service, the school can request services from our hospitals. We can provide outreach services, including outreach assessment using internet or face to face counselling with parents in the school. We can provide educational programs for parents and school staff. It is very important to build up the capabilities of clinical psychologist or counselling psychologist in the school. Therefore, the connection between the hospitals and schools becomes closer and we have case managers to follow up this collaborations system.

We also provide lectures and group activities in the schools. For example, ADHD services could be a very important issue in elementary schools. Therefore, we provide this kind of education and training groups in the schools. As for students need to be assessed for treatment, we can refer them back to our hospital. We have assigned a case manager to handle the referring process. For service quality, we allow 36 minutes for each first visit. For a scheduled visit, it is around half an hour. Currently our hospital and out-patient services, for child psychiatry department in our university hospital, around 10 to 15% of the patients are outside referral by our outreach services.

Youth Mental Health

My second model is mental health in universities and I use our university as an example. NCKU (National Cheng Kung

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Transcript of Plenary Session (I) of 65th Anniversary Symposium on Mental Health on 10th December 2019.

University) is my university and the students number is around 25,000, so we need to create a section for mental health and counselling. One of the university's faculty should become the Director of this section, so currently we have an associate professor of psychiatrist to do the job and a full-time assistant professor of social worker to teach general education with mental health related curricula. Also we have 14 to 17 full-time and several part-time psychologists who work together with all the students. In most of the universities, task of mental health is not only for counselling and prevention strategy is even more important. We provide a consulting psychologist in the university faculty to met with students regularly to encourage interaction. We deliver a lot of educational programmes on mental health problems using different means like lectures, group workshops and other activities. This is a very important task for the detection of mental health issues and we do believe that it is quite important. For example, based on evidence, we found that day time sleepiness is an issue. We conducted studies and found out that day time sleeping is prevalent in our university. We asked further on why there is insomnia, students are not able to fall asleep and the sleeping time is not enough. We found that poor sleepers sleep less than six hours because of the internet addiction. Years ago we found that prevalence of internet addiction was about 18% and now I believe it could be more serious (Tsai SF et al., 2009). We also found that students do a lot of tea drinking. Japanese studies said green tea drinking is good. However, we found that tea drinking causes mild obesity and a lot of mental problems. So we teach our faculty to try to communicate this with their students as an important mental health message.

Regarding gender differences, this is also an issue with premenstrual discomforts (Table 1), which can influence their academic achievement (Cheng SH et al., 2013). We use such data to try to tell our mentors or university faculty to consider these reasons if their sample students have learning problems (Table 2) (Cheng SH et al., 2013). We also find poor attention and ADHD symptoms also. Even if they are 20 years old or more, these problems also exist (Cheng SH et al., 2016).

Table 1
The Premenstrual Discomforts are Prevalent

Comparison of item scores of the premenstrual symptoms questionnaire between students with and without premenstrual syndrome.

Item	Total	PMS(+)	PMS(−)
	1699 (100.0)	677 (39.8)	1022 (60.2)
Depressive mood	401 (23.6)	361 (53.4)	40 (3.9)
Anxiety	658 (38.7)	533 (79.4)	125 (12.2)
Unstable mood	859 (50.6)	601 (88.9)	258 (25.2)
Easy to get angry	518 (30.5)	423 (62.6)	95 (9.3)
Loss of interest in usual exercises	438 (25.8)	313 (46.3)	125 (12.2)
Shorter attention	482 (28.4)	343 (50.7)	139 (13.6)
Fatigue easily	1110 (65.3)	614 (90.8)	496 (48.5)
Appetite changes	434 (25.5)	274 (40.5)	160 (15.7)
Changes in duration of sleep	536 (31.5)	359 (53.1)	177 (17.3)
Nearly out of control	126 (7.4)	118 (17.5)	8 (0.8)
Physical symptoms	1184 (69.7)	582 (86.1)	602 (58.9)

Data expressed as number (percentage).
+ = with; − = without; PMS = premenstrual syndrome.

Cheng SH, Kaohsiung Journal of Medical Sciences 2013; 29: 100-105

Table 2
The Premenstrual Discomforts Relate with Mental Health

Comparison of clinical characteristics between students with and without premenstrual syndrome.				
Predictors	PMS(+)	PMS(−)	Chi-square or t test	
	($n = 677$)	($n = 1022$)	χ^2/t/Z	p-value
Age (years)	21.67 ± 3.80	21.51 ± 4.13	−0.79	0.437
Degree (postgraduate)	349 (51.6)	479 (46.9)	3.34	0.067
Menstrual cycle regularity (no)	192 (28.4)	258 (25.2)	2.13	0.145
Breakfast eating (<3 times/wk)	99 (14.6)	111 (10.9)	5.34	0.021
Food intake (≥3 times/wk)				
Animal fat	137 (20.2)	234 (22.9)	1.68	0.195
Foods containing egg yolk	365 (53.9)	481 (47.1)	7.59	0.006
Fried food	81 (11.9)	85 (8.3)	5.74	0.017
Dessert	144 (21.2)	185 (18.1)	2.40	0.121
Drinks containing sugar	281 (41.5)	366 (35.8)	5.63	0.018
Fast food	190 (28.1)	243 (23.8)	3.90	0.048
Fruit	142 (21.0)	166 (16.2)	6.28	0.012
Drinking habit (≥3 times/wk)				
Coffee	590 (87.1)	907 (88.7)	1.02	0.312
Tea	397 (58.7)	642 (62.8)	2.85	0.091
Alcohol	659 (97.3)	1014 (99.2)	9.51	0.002
Cigarette smoking				
History of smoking	12 (1.8)	8 (0.8)	3.43	0.064
Current smoking	6 (0.9)	4 (0.4)	1.71	0.191
No habitual exercise (<3 times/wk)	241 (35.6)	297 (29.1)	7.58	0.006
PSQI (≥6)	410 (60.5)	416 (40.7)	60.02	<0.001
BSRS-5 (≥6)	242 (35.7)	207 (20.3)	46.14	<0.001
Suicidal ideation	45 (6.7)	33 (3.3)	10.20	0.001
Family history of dyslipidemia	57 (8.4)	47 (4.6)	9.47	0.002
History of psychiatric disorder				
Depression	4 (0.6)	1 (0.1)	3.34	0.068
Anxiety	2 (0.3)	0 (0.0)	3.07	0.084
Anthropometric and lab measurements				
BMI (kg/m²)	20.57 ± 2.90	20.64 ± 2.92	−0.43	0.668
Total cholesterol (mg/dl)	175.73 ± 31.20	171.35 ± 28.10	2.91	0.004
HDL-cholesterol (mg/dl)	64.57 ± 13.06	63.36 ± 12.66	1.84	0.065
Triglyceride (mg/dl)	65.76 ± 29.53	64.39 ± 29.50	0.91	0.365

Data expressed as number (percentage) or mean ± SD.
+ = with; − = without; BMI = body mass index; BSRS-5 = Brief Symptom Rating Scale-5; PMS = premenstrual syndrome; PSQI = Pittsburgh Sleep Quality Index.

Cheng SH, Kaohsiung Journal of Medical Sciences 2013; 29: 100-105

Our university faculty needs to be aware that there are some social anxiety problems among the university students and they need to pay more attention to that (Table 3) (Cheng SH et al., 2017). We need to teach our students to interact with each other. This is a concept for the benefit for health, not just to indirectly improve health but directly to improve health (Cheng SH et al., 2014). We use this data to tell our teachers. Mental health data is collected each time when students receive a medical examination. Each time we give out a questionnaire and using this questionnaire we can improve on our care and health promotion strategies.

Table 3
The Social Anxiety Problems Co-exist with Many High Risk Factors

Risk factors of higher levels of SAS identified by multivariate logistic regression analysis				
Predictors		OR	95% CI	P
Demographic data and lifestyle/social factors				
Degree	Postgraduate versus undergraduate	0.60	0.52–0.70	<0.001
Cigarette smoking	Yes versus no	0.52	0.31–0.87	0.012
PRS_MSF		0.95	0.94–0.97	<0.001
Internet addiction	Yes versus no	2.71	2.28–3.21	<0.001
Personality trait				
OCBS		0.94	0.92–0.97	<0.001
Mental symptoms				
BSRS-suicidal ideation	Yes versus no	2.48	1.95–3.14	<0.001
PSQI	Poor sleeper versus good sleeper	1.70	1.46–1.98	<0.001

–2 log likelihood = 4551.75, Nagelkerke R squared = 0.14.
BSRS, Brief Symptom Rating Scale; CI, confidence interval; MSF, measurement of support functions; OCBS, Organizational Citizenship Behaviour Scale; OR, odds ratio; PRS, perceived routine support; PSQI, Pittsburgh Sleep Quality Index; SAS, social anxiety symptoms.

Cheng SH, Early Intervention in Psychiatry 2017; 11: 314–321

My conclusion is that combining a health and a mental health program promotion is considered as a good strategy. An evidence-based approach is a useful and effective means in engaging the university faculty and the school students. Psychologists should outreach into classrooms rather than sitting in their counselling rooms. Gate-keeper education is very important for mental health promotion for students. This is the list of references covering topics that I mentioned.

Thank you for your attention.

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