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BARRIERS AND CHALLENGES TOWARDS IMPLEMENTATION OF URBAN HEALTH PROGRAM IN NEPAL

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Abstract

Though urban health centers are established in many municipalities in Nepal, there are prominent issues and challenges while high demand of urban health centre and its service is yet to be fulfilled. In order to effectively run urban health service, the challenges and barriers needs to identified first and then move towards the solution of those problems. This study aimed to provide the key information on challenges and barriers of urban health program in Nepal which will be highly beneficial in formulation of new urban health policies and strategies. A cross-sectional descriptive study design was adopted which comprised both qualitative and quantitative approach. A purposive sample of 14 health facilities of two different districts and separate municipalities were surveyed. Similarly, Thirty (30) exit client interviews, twenty one (21) key informant interviews and six (6) group discussions were conducted among related stakeholders. Descriptive and framework analysis methods were used to analyze the data. Findings of this study were presented in accordance with six building blocks of health system as recommended by World Health Organization. Some of the major findings of this study were the need of inter and intra-sectoral coordination and need of feedback addressing mechanism, insufficient medicines year round, inadequate budget allocation, inadequate human resources for providing service according to patient-flow, low priority to UHC for training, insufficient salary and other facilities along with incentives and prevailing traditional healing practices. In order to run UHP effectively and efficiently, these barriers and challenges should be taken into account and addressed while formulating new urban health policies and strategies.

Keywords: Barriers, Challenges, Urban Health Program, Nepal.



Introduction

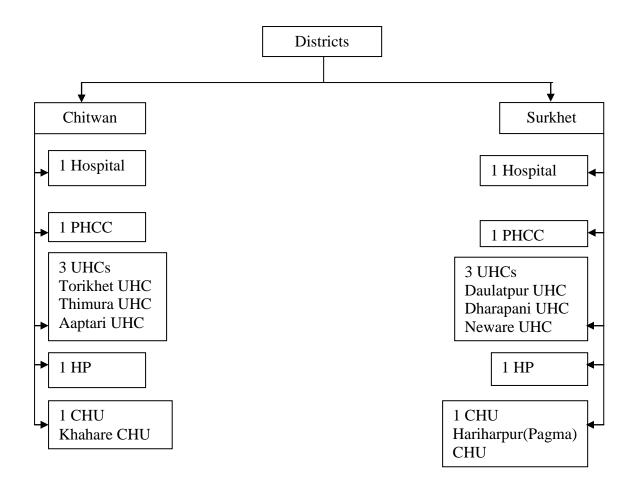
The Constitution of Nepal -2015 safeguarded the health rights of the citizens (Right regarding Environment and Health) where it is mentioned that: "every person shall have the right to live in a clean environment" and "every citizen shall have the right to get basic health service free of cost from the State as provided for in the law" (1)

The government of Nepal has highly prioritized its program with a special concern to the poor and marginalized people both in urban and rural areas (2). Urban health program is carried out by the PHCRD division which is envisaged to revitalize PHC services in Nepal by addressing the unaddressed and unmet issues by PHC (3). There is a significant growth in the urban population as compared to rural population. The growth rate in urban is 3.88 as compared to the rural which is 0.98% (4). The Government of Nepal has approved the Urban Health Policy 2015 which states the Urban Health Center to work for the greater cause of serving the urban population particularly the unreached groups (5). Though urban health centers are established in many municipalities there is a prominent issues and challenges while high demand of urban health centre is yet to be fulfilled (2,6). As, various policies and strategies in Nepal have stated about the urban health promotion, there are loads of problems driven by ineffectiveness in service delivery (7). This study aims to provide the key information on challenges and barriers of urban health program in Nepal. Since this study will explore the information on challenges and barriers of urban health program, the findings from this study will be highly beneficial in formulation of urban health policy and strategies.

Methodology

This study was cross-sectional descriptive study which adopted both qualitative and quantitative study design. A purposive sampling method was used to select the Surkhet and Chitwan district and their respective municipalities. A total of 14 health facilities were selected from both the districts.





Thirty (30) exit client interviews were conducted among the users of HP, CHU and UHCs who belonged to marginalized group and were present at the time of data collection.

Twenty one (21) key informant interviews were conducted purposively among the health workers, UHP focal person from DPHO and municipalities, DPHOrs, focal person at PHCRD. A total of six group discussions were conducted comprising of HFOMC members, local journalist, political leaders, FCHVs and users of marginalized group- women, dalits, janjatis, and elderly, helpless and poor.

Data Collection and Management

Quantitative Data

Collected data was checked for completeness at filed on day of data collection to ensure validity and reliability of data. Coding was done and code book prepared and data was entered in Microsoft Excel 2010. Data was exported to Statistical Package for Social Sciences (SPSS)



version 17 and cleaning was done by running frequencies tables and sorting ascending and descending. On finding missing data, the record was reviewed and was re-entered as per questionnaire and observation checklists. Frequency, percentage and average were calculated for the data obtained as per the set objectives.

Qualitative Data

The information from KIIs and GDs was organized and transcribed in Nepali based on the audio recording and field notes brought by field researchers. The handwritten Nepali transcripts were then translated to English with the help of experienced translators taking care of the feelings, sentiments and meaning of the conversation. Each transcript was read and reread to get familiarized. Subsequently, after familiarization with the transcripts, Framework analysis was done based on six building blocks of health system by WHO and objectives of the study. The contents of KIIs and GDs were coded into categories and then the categories were sorted according to the themes of analysis. Data was organized corresponding to those themes and summary was written followed by the use of suitable verbatim. Final result and findings were reviewed and discussed among research team in order to maintain quality and relevance of the data.

SN	Techniques	Tools	Data/Information
1	Exit Client	ECI questionnaire	Strength of services, challenges barriers and
	Interview		ways for improvement of services, Waiting
			time, client satisfaction on provided services
2	Group	Group Discussion	Stakeholders opinion on strengths, barriers
	Discussion	Guidelines	and challenges in urban health services,
	with		recommendations for improvement of services
	Stakeholders		
3	Key Informant	KII guidelines	Strengths, barriers and challenges in urban
	Interview		health services, situation of human resources,
			physical infrastructure, drug and diagnostics
			in urban health services, effectiveness of
			current urban health policy and programs,
			recommendations for improvement of services



4	Observation of	Observation	Available health services, physical
	health facilities	checklist for	infrastructure including store, availability and
		hospital, PHCC and	adequacy of essential medicines
		UHC, CHU and HP	
5	Record review	Record review	Situation of human resource,
		format for hospital,	Utilization of health services specially by
		PHCC, UHC, CHU	targeted group
		and HP	

Results

Findings of this study are presented in accordance with six building blocks of health system recommended by WHO.

Leadership/Governance

Insufficient coordination

In this study, majority of the participants during KIIs and GDs mentioned the need of inter and intra-sectoral coordination of UHC to strengthen smooth running of UHP. Participants from DPHO in Chitwan and Surkhet reported about good coordination between municipality and DPHO regarding UHP. However, director of PHC-RD during KII shared that lack of coordination and collaboration between stakeholders of UHP is one of the barriers for effectiveness of UHP. And during GDs and KIIs, there was felt gap in coordination between DPHO and municipality authority which could impact its accountability towards UHP and UHC staffs.

We are stuck [Duee Dhunga Bicha ko Tarul] in between two powerful organizations: DPHO and Municipality. There is inadequate coordination between UHC, DPHO and the municipality. DPHO says that we are not under MOH so we are not their staff and on the other hand, the municipality says, "You are not our part/responsibilities....

GD_Dharapani_Surkhet



Felt Need of Local Representation

During KII, Director of PHCRD highlighted that lack of local representation in UHP was standing as another challenge in effective implementation of UHP. The participant said, "*There are many decisions which have to be taken by local people or public representatives in municipality and ward. But it could not be successful because of the staff [health worker and government staff] leadership."*

Need for feedback addressing mechanism

Majority of the health service providers during KIIs and GDs reported that monitoring and supervision was taking place in their institution on time along with necessary feedback. Nevertheless, most of the participants during KIIs emphasized the need for addressing the feedback during supervision and monitoring to further strengthen services from the facilities.

Monitoring and supervision of CHU are done by DPHO and local health facility as per need. Problems discovered during the monitoring and supervision demand to be addressed properly.

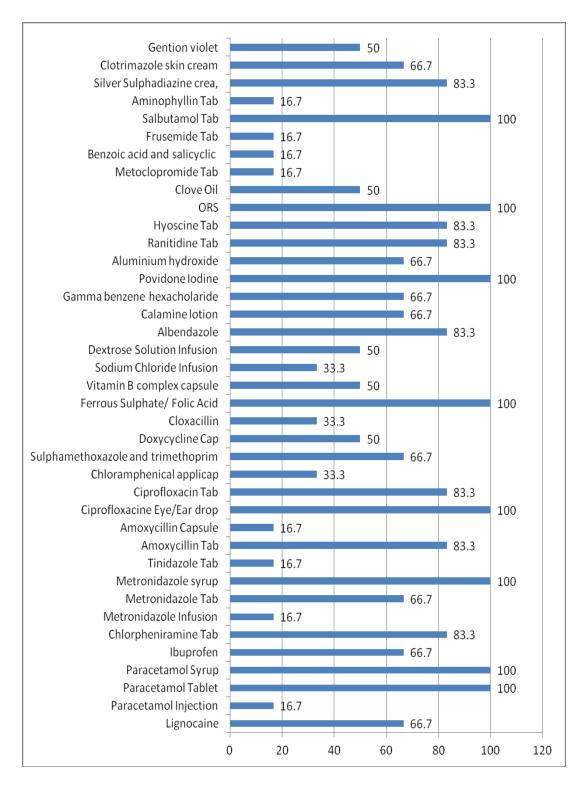
KII_ Khahare CHU_Chitwan



Medical products and technologies

Availability of Medicines and Medical Procedures' Equipments

Based on the list of essential drugs as per health facility under study among two PHCCs, sixty one type of medicines were present in either of the PHCCS while ten type of medicines were absent in both PHCCs.





In all of the UHCs, absorbent cotton, gauze and rectified spirit were available; surgical gloves, adhesive tape (4") and disposable syringes were present in 83.3% UHCs and 16.7% UHCs had IV sets and IV canula. None of the UHCs had rubber catheter.

Medical procedures' equipment	UHC (n= 6) %
Absorbent Cotton	100
Bandage	83.3
Gauze	100
Surgical Gloves	83.3
IV Set	16.7
IV Cannula	16.7
Phenol	33.3
Disposable Syringe	83.3
Suture set	66.7
Catgut	50
Adhesive tape 4"	83.3
Surgical Blade	50
Rectified Spirit	100
Chlorine powder	50

Insufficient Medicines, Equipment and Logistics

Majority of the participants during study shared that there were no year round adequate medicines, equipment and logistics available in the UHC. This caused health care service providers unable to provide optimal services from UHCs. DPHO had been providing listed free essential medicine to UHCs while need of ensuring the availability and adequacy of listed free essential drugs was felt among participants of KIIs and GDs.



Essential medicines are not supplied sufficiently from DPHO since two years. Neither we can say it is not available nor we can say it is available. Essential medicines are supplied in small amount from time to time but in insufficient quantity.

KII_Bharatpur HP_Chitwan

The findings from almost all of the GDs suggest that lack of adequate essential medicine all the year round and need of frequent travels for the same had been a barrier for service utilization. Participants also shared that users even retorted and asked to close the health facility health service providers when they didn't receive medicines and consequently were less likely to revisit the health facility.

Lack of provision of recording and reporting forms

Recording and reporting of essential information is crucial for evaluating effectiveness of any program. In this study, some of the participants during GD in Surkhet shared that recording and reporting forms were not provided in their institution.

There should be proper recording & reporting of achievements that would be helpful for evaluation of UHCs. So, for this, staff should be provided with adequate logistics along with HMIS training.

 $GD_Thimura_Chitwan$



Inadequate physical infrastructure

The building of hospitals, PHCCs and HPs were pakki and that of CHU was kachhi and semi kachhi one each. Four (66.70%) UHCs were pakki, one (16.65%) was semi kachhi and one (16.65%) was in kachhi building.

Physical Infrastructure	Type of Health Facilities				
	Hospital	РНСС	HP	CHU	UHC
	(2) %	(2) %	(2) %	(2) %	(6) %
Availability of general requirements					
Electricity	100	100	100	50	83.3
Power backup during load-shedding	100	100	50	0	16.7
Internet	100	100	0	0	0
Separate toilet for male and female	100	50	100	0	16.7
Ramp for wheel chair	100	100	100	0	33.3
Separate rooms for services				<u> </u>	<u> </u>
OPD	100	100	100	0	66.7
Dispensary	100	100	100	0	50.0
ANC/PNC	100	100	100	0	16.7
Waiting room	50	50	100	50	16.7
Labour room	100	100	NA	NA	NA
Availability of citizens' charter		<u> </u>	<u>I</u>	<u> </u>	<u> </u>
Yes	100	100	100	50	16.7
*NA= Not applicable	I	<u> </u>	<u>I</u>	<u> </u>	<u> </u>

Significant number of participants during GDs reported lack of own land and well facilitated building with adequate room/space as a barrier for service utilization. Participants also highlighted that there were no sufficient and well facilitated rooms for service delivery even when on lease because of which health workers were not able to provide quality service. A health worker during GD in Aaptare, Chitwan said that lack of well ventilated room during treatment was increasing the risk of airborne disease for them. Most of the UHC in charge



also mentioned that there was no separate toilet for male and female as well as no provision of permanent drinking water facility in their respective UHCs.

We are forced to conduct EPI clinics under open sky which is very difficult for us and the service users.

GD_health worker_Dharapani_Surkhet

UHC is shifted frequently from one place to another which is creating difficulty to adjust and provide services in new settings.

KII_Aaptari UHC_Chitwan

Health Service Delivery

Service availability

Majority of the heath facilities; Hospital, PHCC, HP, UHP, CHU had the facilities of OPD service, growth monitoring and family planning service.

	Availability					
Types of services	Hospital	РНСС	HP	CHU	UHC	
	(2) %	(2) %	(2) %	(2) %	(6) %	
OPD services	100	100	100	100	100	
Immunization	100	100	100	100	66.7	
Growth monitoring	100	100	100	100	100	
ANC/PNC	100	100	100	100	83.3	
Delivery services	100	100	50	50	0	
Family planning	100	100	100	100	100	
CBIMNCI	100	100	100	100	66.7	
DOTS	100	100	100	*50	83.3	
STI	100	50	100	50	50	
Leprosy	100	50	100	NA	50	
IEC corner	100	50	100	50	16.7	
ORT corner	50	100	100	50	16.7	
Lab services	100	100	50*	NA	NA	



Service record forms and registers	100	100	100	100	83.3
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* Not mentioned in guideline but services is available NA- Not applicable as per guideline

Limited Services Related to NCDs

Most of the focal persons during KIIs in Surkhet, Chitwan and Kathmandu said that services in UHP were limited and was not able to incorporate demand based preventive and promotive aspects of health along with NCDs

We have to open many urban health centers if we want to provide services to urban slums and privileged people. We are not able to establish accordingly. The challenge is that demand is more but delivery is low and we are not able to give required prerequisites in all the places.....UHP is not able to incorporate non-communicable diseases and its preventive aspects despite the fact that NCDs are in increasing trend in the urban area.

KII_Director_PHCRD

Unavailability of 24x7 Services in UHC

Findings from almost all the GDs suggested that due to absence of 24 hourly services and birthing centre in the UHC, local people had to travel far distance for delivery services which consequently discouraged them to take other facilities provided by UHCs.

As there is no provision of 24 hrs emergency services from the UHC, we still have to go far for minor treatment and injuries like in the past. So there is difficulty in seeking medical care after the closing of health facility esp. during night time.

GD_Thimura_Chitwan

Perceived Discrimination among Disadvantaged Group

There were some participants during GDs who felt that there was discrimination in the services because they belonged to disadvantaged and marginalized group and they were not satisfied with the services as they were not getting health services whenever required and their health needs were not properly addressed.



[Pichhhadiyeko barga le ke sewa pani pichhadiyeko paune] We know that we are from backward community and we are behind other communities in various perspectives but it does not mean that we cannot receive quality services like them.

GD_Dharapani_Surkhet



Health care financing

Inadequate budget allocation for UHCs

Smooth functioning of UHC was felt to be affected by inadequate budget allocation as expressed by some of participants during GDs and KIIs. The findings from GDs also showed that some amount of money was received by UHC from DPHO on the basis of total number of OPD visits and minimal user fee was charged in some UHCs which was aiding them to manage general office expenditure. However, participants also highlighted that the amount was not sufficient for some of the UHCs in absence of alternative funding sources. A participant during GD in Dharapani, Surkhet said, "User fee (Rs.10 for new & Rs.5 for old service user) has been implemented in our UHC as per HFOMC decision to generate fund for office expenses."

It was really hard. But still, we succeeded to allocate NRS. 75,000 for purchasing medicines and medical equipments and NRS. 25,000 for mother's group training through ward meetings this year which got approved by municipal council. This required a lot of dedication and commitment as ward meetings usually do not give priority to health programs. They assume it as if it is solely the responsibility of DPHO.

GD_Daulatpur_Surkhet

Health Workforce

Most of the sanctioned posts were found to be fulfilled. In addition, 24 temporary posts in hospital and 5 temporary posts in PHCCs were created.

Participants in both the districts shared that there are adequate human resource with fulfilled sanctioned post.

Type of Health Facilities	Sanctioned post			Temporary post
Type of ficultin fucilities	Filled Vacant Total		remporary post	
Hospital	40	11	51	24
PHCC's	23	1	24	5
HP	16	0	16	0



UHC	16	2	18	0
CHU	4	0	4	0

Insufficient Workforce Based on Workload

Significant number of participants during KIIs and GDs shared that present number of human resource were not adequate for providing service according to patient-flow even when the sanctioned post were fulfilled. Important number of participants also added that inadequate number of human resources, lack of updated skills was resulting in compromization in quality of health service.

We are providing services like health post but there is only technical staff so considering the workload the available staffs are not adequate. When we have some important or emergency work or when we have to participate in training, we even have to close the health facility because there is no one to provide service. So, we are unable to provide service regularly.

GD_Daulatpur_Surkhet

Slum areas people, poor, helpless, elderly are utilizing health services more than before. Everyday 300-400 people are getting health services from this UHC. Weekly 50-60 elderly people are utilizing health services from UHC as UHC is nearby their home. So, staffs are not adequate based on patient flow.

KII_Torikhet UHC_Chitwan

Less Priority to UHC Staff for Training

Most of the participants during GDs shared that UHC staff were not given priority for training which was making it difficult for them to deliver quality health service. Significant number of focal persons during KII accepted that most of the training conducted by DPHO had not been provided to UHC staff because of their temporary recruitment. Subsequently, DPHOr in Surkhet and Chitwan during KII also mentioned lack of job retention as a reason for not training temporary staff.



Health workers are unable to provide quality health services due to lack of training and skill building activities. We have not taken CB-IMNCI training so we were treating pneumonia in under-five children by cotrim instead of amoxicillin until we heard about it from other health workers. So, I mean to say that not receiving training has greater negative impact to service users than service providers. Accurate treatment is the right of patients.

KII_Dharapani UHC_ Surkhet

If we provide training to permanent staff he can provide health service in any part of the country where ever he is transferred but if temporary staffs are provided with training it is difficult to ensure their continuity of service. Therefore staffs of UHC are not getting priority for training. But we are trying to provide training to UHC staff as much as possible.

KII_UHP focal person_DPHO_Chitwan

Inadequate Salary and Motivation to staff

Significant number of participants shared that UHC staff were not provided with adequate salary and other facilities along with incentives. UHP focal person in Chitwan during KII highlighted that salary of UHC staff was not satisfactory as it was comparatively lower than government's salary scale. In addition, findings from all GDs suggests that the annual amount allocated for salary from DPHO was insufficient to provide salary as per government scale in most of the UHCs and most of the times, budget separated by municipality to supplement such deficits was insufficient. Few of the participants during GDs in Aaptari and Torikhet in Chitwan also shared that staffs were not given full-scale salary or timely salary. A participant during GD in Aaptari, Chitwan also shared that staffs were recruited on temporarily basis which was decreasing their level of motivation. The participant said, "Staffs are not motivated well. The reason for lack of motivation among staff is because they are recruited on temporary basis."

Most of the participants during KIIs reported that the permanency of UHC staffs, their justifiable salary, incentives and other facility has not been addressed by present policy due to which there has been difficulty in ensuring their retention as they leave the temporary service in search of better opportunities. The participant shared, "They take training and leave the service whenever they want and there is no any mechanism to retain them. It means that we are providing input but output is not guaranteed." The UHP focal person of DPHO Surkhet



also said, "The problem of retention and continuity of health workers is due to lack of adequate facility and incentives."

Irregular Availability of health service providers

Some of the participants during GDs reported that health workers were absent in UHC because of which service user were not able to utilize health service when they required. Some of the excerpts:

Sometimes the UHC is not open even during working days so people are not getting health service on those days.

GD_Dharapani_Surkhet

Information and research

Lack of awareness among people

The findings from GDs and KIIs suggest low level of awareness about health among local people as one of the barriers for service utilization. Majority of the health facilities' in-charge mentioned that there was lack of awareness among local people about health services provided from health facility. The in-charge of Daulatpur UHC said "The utilization rate has not improved satisfactorily in some places due to low level of awareness in the community."

Traditional Belief to access service

Majority of participants emphasized that prevailing traditional healing practices, cultural norms and values also influenced service utilization among target population in some places.

Due to prevailing traditional healing practices among local people, they are not getting appropriate treatment on time. The first point of contact is usually the traditional healers because people are bounded by local cultural practices and beliefs...... Whenever I see any ill children in my class I tell them to go home and seek medical care. But they try to make excuses saying that there is no one at home or their parents have no time for such things. When I tell them to come with me for checkup then they refuse to go to the health facility saying that their parents will get angry or punish them if they come to know about it.



Discussion

The UHOs in this study were found to have insufficient coordination with other health institutions and bodies. Despite the existing democratic system in the country, urban health centers showed the need of local representation in the existing staff. Also, timely and adequate supply of medicine, equipment and logistics supply year round should be addresses with proper monitoring system of the distributed medicines. Though, urban health program comprises of essential services but there seems to be need of incorporating more services related to non communicable disease. It was found that people perceived that they were discriminated while receiving service which entails the need of more attentive behavior of health workers towards disadvantaged groups. Smooth functioning of UHC was felt to be affected by inadequate budget allocation and hence sufficient budget allocation has to be done with proper monitoring and evaluation.

In general, sanctioned post were fulfilled but still it was found that the present health workforce were not sufficient to provide effective service based on the increasing work load and service users. Further, in order to run UHP effectively, government has to give concern over the training, incentive and motivation of health service providers as well. UHCs and its staff have to improve the level of awareness through campaigns and community level programs so that people prioritize UHS first that other traditional health services.

CONCLUSION

This study provides a general idea of the existing barriers and challenges of UHP. It gives an idea of some of the major issues being faced by both demand and supply side. Hence, these challenges and barriers can play a vital role in formulating a healthy and more effective urban health policy in the future.

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BARRIERS AND CHALLENGES TOWARDS IMPLEMENTATION OF URBAN HEALTH PROGRAM IN NEPAL

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Correlations between Phthalates Exposure and Kidney Function in the General Taiwanese: Results from Taiwan Environmental Survey for Toxicants

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Background/Aim

Phthalates (PAEs) are endocrine disruptors and national scale survey indicated that ubiquitous PAEs exposure in the general Taiwanese. Some studies suggested that children exposed to phthalate-tainted products were positively associated with increased urinary microalbumin. We aim to assess the correlation between PAEs exposure and renal function index in the general Taiwanese.

Methods

We enrolled 311 subjects [\Box 40 years old (yrs), N=183; < 40 yrs, N=128] participants who provided questionnaire information, blood and urine samples from the Taiwan Environmental Survey for Toxicants (TESTs) 2013. Urinary PAEs metabolites were analysed by an online modified analytical method coupled to a liquid chromatograph/electrospray tandem mass spectrometer method with quantification by isotope dilution. In renal function index, we measured serum level of blood urea nitrogen (BUN), and urinary levels of creatinine, microalbumin, albumin and protein. We used multiple and logistic regression or cumulative risk assessment (estimated HI values, HI_{hep}) to evaluate the relationships between PAEs exposure and renal function in the general Taiwanese.

Results

Median levels of urinary Σ DEHPm and Σ DBPm in subjects <40 yrs were 0.29 (interquartile range [IQR] = 0.17-0.44) and 0.14 (IQR = 0.10-0.30) nmole/mL, respectively, which were higher than those [Σ DEHPm: 0.19 (IQR= 0.12-0.32) nmole/mL; Σ DBPm: 0.11 (IQR = 0.05-0.19) nmole/mL] in subjects \Box 40 yrs. The frequency of abnormality of microalbumin (>1.9 mg/dL), ACR (albumin/creatinine ratio> 30 mg/g creatinine), BUN (>20 mg/dL), eGFR (<60 mL/min/1.73 m²) were higher in subjects \Box 40 yrs than those <40 yrs. The adjusted odds ratio (AOR) of the highest quartile of estimated DEHP daily intake in subjects \Box 40 yrs for abnormal microalbumin was 14.2 (95% confidence interval (CI)= 1.52-133.3) fold higher than that of the lowest quartile group. However, we didn't find similar phenomena in subjects <40 yrs. Using multiple regression model, we found that cumulative HI_{hep} were significantly increased with microalbumin (β : 5.12, 95% CI: 2.52, 7.72; p<0.001), ACR (β : 1.12, 95% CI:0.005, 2.23; p=0.049), protein (β : 3.05, 95% CI: 0.94, 5.12; p=0.005) in subjects \Box 40 yrs without type 2 diabetes mellitus after adjustment of age, sex, BMI, smoking and drinking.

Discussion

In the present study, the sum of DEHP metabolite significantly increased with some renal index, such as microalbumin, BUN, and ACR (albumin-to-creatinine ratio). A moderate amount of albumin could mean early stages of kidney disease, and it might be a marker of endothelial dysfunction, and subjects are at a higher risk for cardiovascular disease (Weir, 2007). In the National Health and Nutrition Examination Survey between 2009 and 2010, a total of 677 children were recruited to evaluated the association between phthalates exposure and low-grade albuminuria. About threefold increase in DEHP metabolites was detected in the urine, and a 0.55 mg/g increase in the ACR was identified (Trasande et al., 2014).

The subacute/chronic toxicity of DEHP in kidneys was observed to related to PPAR-alpha mediation (Ward et al., 1998). Animal studies have shown that DEHP can cause the chronic progressive nephropathy (David et al., 2000). DEHP could also cause nephropathy in the renal proximal tubules of rodents (Reubsaet et al., 1991). Rats administrated with high DEHP dose showed a significantly higher incidence of focal cysts and a significant decrease in kidney function as demonstrated by creatinine clearance (Crocker et al., 1988). Activation of peroxisome proliferator-activated receptor γ (PPAR γ) has been demonstrated with DEHP exposure, which it can increase the production of oxidative stress and downregulated expression of insulin receptor and GLUT4 proteins in the liver of SD rats and normal human hepatocyte line (L02 cells) (Zhang et al., 2017).

Limited paper has provided the proper index to describe the adverse renal effect by phthalate exposure. We first try to use a hazard index approach based on liver effect to evaluate the renal function. Whether the type 2 DM case were excluded, the positive associations were still observed between hazard index and microalbumin adjusting for some confounding factors. Many liver diseases often accompany with chronic renal disease, either because many systemic conditions affect both organs or the renal disease occurs as a complication of certain liver diseases (Wong, 2011). Therefore, renal dysfunction is a common and serious problem in patients with advanced liver disease. In patient with hepatorenal syndrome (HRS), changes in renal physiology in acute liver failure or cirrhosis can observed to renal failure (Gines et al., 1993).

Conclusions

Our findings suggested that higher daily exposure of PAEs were significant positively associated with an increased risk of microalbumin. Large or mechanistic studies are worthy to elucidate the association.



Models	Log-microalbumin				Log-BUN			Log-ACR				
	Beta	(95%CI)		Р	Beta	(95%CI)		Р	Beta	(95%CI)		Р
Model 1	5.121	2.524	7.719	<0.001	0.710	0.015	0.139	0.015	1.115	0.005	2.225	0.049
Model 2	1.603	0.399	2.808	0.009	0.156	-0.104	0.416	0.238	0.329	-0.182	0.839	0.206
Model 3	0.075	-0.417	0.566	0.765	0.011	-0.105	0.126	0.853	-0.102	-0.303	0.099	0.318
Model 4	0.059	-0.448	0.565	0.819	0.010	-0.106	0.125	0.869	-0.108	-0.314	0.098	0.303
Models	Log-eGFR				Log-Protei	n						
	Beta	(95%CI)		Р	Beta	(95%CI)		Р	-			
Model 1	-0.124	-0.557	0.309	0.571	3.047	0.939	5.155	0.005	-			
Model 2	-0.059	-0.246	0.128	0.535	0.967	0.005	1.928	0.049				
Model 3	-0.069	-0.176	0.037	0.201	0.213	-0.038	0.465	0.096				
Model 4	-0.069	-0.175	0.038	0.204	0.206	-0.051	0.464	0.115				

Table 1. Adjusted regression coefficient and 95% CI for change in HQ_Liver index in relation to unit-increased in renal function index.

Model 1: Age over 40 years and exclude subjects having type 2 DM, and then adjust for BMI, gender, age, smoking and drinking.

Model 2: Age over 40 years and then adjust for BMI, gender, age, smoking, drinking and subjects having type 2 DM.

Model 3: Age less than 40 years and exclude subjects having type 2 DM, and then adjust for BMI, gender, age, smoking and drinking.

Model 4: Age less than 40 years and then adjust for BMI, gender, age, smoking, drinking and subjects having type 2 DM.



DEHP	Case/ N (%)	OR (95%CI)		DiNP	Case/ N (%)	OR (95	%CI)	BBzP	Case/ N (%)	OR (95	%CI)	
Q1	1/45 (2.2%)	1	_	Q1	4/45 (8.9%)	1	_	Q1	7/46 (15.2%)	1	_	
Q2	2/47 (4.3%)	3.03	0.24- 37.98	Q2	9/46 (19.6%)	1.78	0.44- 7.27	Q2	3/46 (6.5%)	0.28	0.05- 1.41	
Q3	6/46 (13.0%)	10.80	1.05- 111.39	Q3	0/46 (0.0%)	0.00	_	Q3	2/45 (4.4%)	0.17	0.03- 1.07	
Q4	9/45 (20.0%)	14.73	1.48- 146.34	Q4	5/46 (10.9%)	0.99	0.21 -4.69	Q4	6/46 (13.0%)	0.63	0.16- 2.40	
DnBP	Case/ N (%)	OR (95%CI)		DiBP	Case/ N (%)	OR (95%CI)		DEP	Case/ N (%)	OR (95	%CI)	
Q1	4/48 (8.3%)	1	_	Q1	4/45 (8.9%)	1	_	Q1	5/46 (10.9%)	1	_	
Q2	4/45 (8.9%)	1.18	0.25- 5.52	Q2	7/47 (14.9%)	1.42	0.35- 5.82	Q2	5/45 (11.1%)	0.99	0.23- 4.27	
Q3	6/45 (13.3%)	1.76	0.40- 7.76	Q3	5/46 (10.9%)	1.26	0.29- 5.53	Q3	4/47 (8.5%)	1.07	0.23- 4.94	
Q4	4/45 (8.9%)	1.12	0.23- 5.33	Q4	2/45 (4.4%)	0.45	0.07-2.91	Q4	4/45 (8.9%)	1.02	0.23-4.51	
DMP	Case/ N (%)	OR (95%	6CI)	Explana	tory variable: PA	Æs						
Q1	4/47 (8.5%)	1	_	Respons	Response variable: Microalbumin							
Q2	1/45 (2.2%)	0.13	0.01 -1.43	Adjuste	Adjusted for type II DM, obesity, age, smoking, drinking, sex							
Q3	5/45 (11.1%)	0.77	0.15- 3.86									
Q4	8/46 (17.4%)	1.27	0.31- 5.26									

Table 2. Association Between Urinary PAEs daily intake and the Risk of Microalbumin in subjects over 40 yrs



Dance in Shackles: the Limited Successes of Tobacco Control in Beijing and Failures

in other Cities of China

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Abstract

China is the world's largest producer and consumer of tobacco products. With more than 300 million smokers, China has 740 million non-smokers exposed to second-hand smoke. Except for Hong Kong and Macau, the two Special Administrative Zone of China, Beijing ranks top 1 on protecting the public from the exposure of second-hand smoke. There are many reasons for Beijing's limited successes in tobacco control. Firstly, the strongly incentive of Beijing Municipal Government to control tobacco. Secondly, the external support from international organizations and social organizations. Thirdly, the deeply participation of academics and the public in investigation, monitoring, evaluation of the regulations. Fourthly, the co-governance mechanism on tobacco control. But it is very difficult for other cities in China to follow Beijing's step. Firstly, tobacco production is a state-run enterprise that provides substantial earnings and tax revenue for many local governments. Secondly, the legislation power of local governments which are willing to control tobacco is limited. Thirdly, the current administrative performance evaluation system and the disadvantageous position of Health Administration in the Chinese government reduce the effectiveness of tobacco regulation. But there are still some measures for local governments to do before the promulgation of state legislation.

Key words Tobacco control, FCTC, Beijing, Local Governments



Eating Disorders in Adolescents: Relationship to Gender and Age

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Abstract

Eating attitudes and behaviours result from a long process of socialization seized and interpreted within a community and family, being strongly influenced by peers. Early identification of eating disorders in adolescents allows better intervention. This study aims to analyse the relationship between eating disorders and gender and age. A descriptive-correlational, cross-sectional and quantitative approach, whose sample consisted of 768 students from a high school in the north of Portugal. In the data collection we used a questionnaire, which was applied in the classroom. In the data treatment we used SPSS Software, having used descriptive and inferential statistics. The majority of the sample (n = 768) was male (53.8%) and belonged to the age group of 15-16 years old (34.0%). The prevalence of moderate and severe eating disorders was, respectively, 21.6% and 8.0% (n = 765). The proportion of eating disorders categories did not differ significantly between genders (χ^2 : p> 0.524), nor between age groups (χ^2 : p> 0.888). The overall score of the Eating Attitudes Test did not differ significantly between genders (t: p > 0.692), neither between age groups (ANOVA: p > 0.720). The Bulimia subscale score differed significantly between genders (t: p <0.043), with female gender presenting more eating disorders. The prevalence of eating disorders in these students is quite considerable. The categories of eating disorders are not related to gender or age. Only the subscale "Concern about food and bulimia" is related to the female gender, which presented more changes in this scope. The School Health team should follow these students to prevent the emergence of more serious situations of eating disorders.

Key words: Adolescent; Eating Disorders; Nervous bulimia; Nervous anorexia; Public health.



1. Introduction

Adolescence according to UNICEF (2011) is a stage in the life cycle of the human being between 10 and 19 years of age, marked by profound biopsychosocial changes, with repercussions on all behaviors, including eating behavior. It is also at this stage that appears the notion that ingested nutrients must meet the needs inherent to growth and development so that they can prevent health problems in adulthood (Antunes, et al., 2015).

The body is one of the forms of communication between the individual and the environment, therefore the excessive concern with appearance in the stage of adolescence. At this stage the natural physical changes of the body become feelings of sexual tension and physical attraction, influencing social relationships (Lofrano-Prado, Prado, Piano & Dâmaso, 2011).

At the base of young people's eating choices are some of the characteristics of this stage, such as emancipation, social acceptance, concern with body image, social and peer group tendencies, and little concern with health-related aspects (Antunes, et al., 2015). Also Cordoni, Silva, Reato, Brito & Mistura (2016), accentuate the influence that the body image exerts on the adolescents choices.

Many of the norms as humans should behave are conditioned by the culture and eating behavior is included here. The influence of the environment encompasses patterns of intake and specific eating habits. Eating, therefore, is a social act in which the family and peers influence the development of child's and adolescent's preferences, attitudes, and eating behaviors (Silva, Vaz, Rego, Dias, Azevedo & Guerra, 2014).

Currently the scientific community accepts widely that eating habits acquired in childhood and adolescence can influence the physical, intellectual and emotional development of individuals and have negative effects on their health (Silva et al., 2004).

Food behavior has a determinant role for health, since the practice of healthy food is an essential element for the quality of life and health of individuals (Pereira, Silva & Sá, 2015).

According to Viana (2002), the eating behavior is considered as a result of the influence of both psychological and social factors, involving not only the intake act that refers to the quantitative aspects of food intake, but also the set of attitudes and psychosocial factors, that is, the qualitative aspects related to the selection and decision of which foods to consume.

Attitudes and eating behaviors may be considered to be the result of a long process of socialization and development that has been apprehended and interpreted throughout life, in a community-based and family environment, and influenced by peers (Silva et al., 2014).

Eating disorders are characterized by excessive preoccupation with form and body mass, which lead the patient to adopt inappropriate behaviors, mainly directed to the reduction of body mass. They can be divided into three diagnostic categories: Nervous Anorexia (NA), Nervous Bulimia (NB) and eating disorders without any other specification (Lofrano-Prado et al., 2011).

The development of eating disorders is characterized by the existence of a set of eating habits, obsessive practices of weight control, attitudes and behaviors, in the context of food intake, associated with changes in body image and psychological changes (Silva et al. al., 2014).

Data on the last two decades of the 20th century and the first decade of the 21st century shows a dramatic increase in the prevalence of eating disorders in adults, children and adolescents (Lofrano-Prado et al., 2011). In the words of Cardoso (2017) the prevalence of eating disorders has increased in recent years, in both sexes. According to Dunker & Philippi (2003), the incidence of eating disorders has practically doubled in the last 20 years. Specifically, in the case of NA, the incidence increased steadily between 1955 and 1984 in adolescents from 10 to 19 years old, being nine times more common in women than men.

In the United States of America (USA) and Western Europe the prevalence of NA was 0.3%, and in European countries it could vary between 0.1% and 0.69%, being higher in women with a ratio of 3.5: 1. In men, the prevalence is lower at 0.2%. Throughout the life the prevalence in women was 0.7% and in men 0.2%. In Portugal, the prevalence of NA in adolescents and female university students was 0.4%.



In turn, it is estimated that NB affects 0.5% to 4.1% of adolescents and young women and between 0.1% and 0.36% in men, with a ratio of 2: 1. Lifetime prevalence was 1.2% in women and 0.4% in men. In Portugal it affects 0.3% to 3.0% of adolescents and young women (Pinto, 2010).

Eating disorders due to their increasing among adolescents, their severity and their implications in society can be considered a Public Health problem. It is therefore essential to have a more in-depth knowledge on this subject to act in the prevention of these eating behaviors and attitudes. For this, it is also important to identify risk factors in order to prevention be more targeted and effective (Pinto, 2010).

The development of eating disorders results from a combination of biological, psychological and social factors (Radmanovic-Burgic, Gavric & Burgic, 2011). In the words of (Pereira et al., 2015) with the start of teenage years, adolescent's food choices become more autonomous and independent, which seem to be associated with an increase in inappropriate eating behaviors. Contributing to this are many factors such as the quest for independence and social acceptance, greater vulnerability to social and commercial pressures, concern for physical appearance and unconcern about health.

Gender is fundamental in understanding eating behaviors. In fact men and women interpret food differently. While males prefer to eat red meats, high-calorie processed foods, chips, and less fresh fruits and vegetables, the female gender reveals a greater awareness of the need for healthy eating, with care that includes choosing and buying food until their cooking. Girls are more dissatisfied with their bodies than boys of the same age, and the percentage of girls dieting is quite high (Antunes, et al., 2015).

Radmanovic-Burgic et al. (2011) agree with this line of thinking and report that eating disorders are more common in especially adolescent women who are at higher risk and Cardoso (2017) states that women are associated with eating disorders such as NA and NB.

Early identification of Eating Disorders in both children and adolescents may be an important part of understanding the onset of some pathologies such as obesity, whose incidence has been increasing exponentially (Silva et al., 2014).

It is within the scope of this problem that we carry out this study in which we formulate the following objectives: i) to evaluate the prevalence of moderate and severe Eating Disorders in the sample; ii) to analyze the relationship between Eating Disorders and sex and age.

There are some studies carried out at national and regional level in this area, but few in this population and in this region of the country.

2. Methodology

This is an observational, descriptive-correlational, transversal and of quantitative approach (Fortin, Côté & Filion, 2009).

2.1. Participants

The target population of this study was composed by 1011 students, who attended a secondary school with 3rd cycle, of the interior north of Portugal. As inclusion criteria we established: i) to be a student at the school where the study was conducted; (ii) be aged between 11 and 19 years old. The exclusion criteria were: i) not have completed at least 80% of the questions; ii) Fail to provide the informed consent of parents/guardians. After applying the inclusion criteria, the sample consisted of 768 students, about 75.9% of the population.

Of the total sample (n = 768 students), the majority were male (53.8%), belonged to the 15 to 16 age group (34.0%) and attended high level of education (59.4%), (**Table 1**). The minimum age was 11 years old and the maximum 19 years old.



Variables	Af	Rf (%)			
	Female	355	46,2		
Gender	Male	413	53,8		
	11-12 years	104	13,5		
Age group	13-14 years	226	29,4		
go group	15-16 years	261	34,0		
	17-19 years	177	23,0		
	3rd Cycle	312	40,6		
Level of Education	High level	456	59,4		
Total		769	100		

Table 1Characterization of the sample (n = 768)

Legend: Af – Absolute frequency; Rf – Relative frequency.

2.2. Material

In data collection we used a self-filling questionnaire, anonymous and confidential, constructed and validated for this purpose. This instrument was organized in two parts: part I aimed to obtain the socio-demographic data of the students regarding to gender, age group and level of education; part II intended to characterize the eating habits regarding to the frequency and amount of food consumed and to evaluate the eating disorders through the Eating Attitudes Test (EAT26) scale (Nunes, Camey, Olinto & Mari, 2005). This study does not include the eating habits.

It is a Likert scale with 6 options of answer (1-6), between always (1) and Never (6). It consists of 26 items divided into three subscales: 1) Diet - Aspects related to diet compliance, reflects the pathological refusal to foods of high energy value and concern with body image (items 1, 6, 7, 10, 11, 12, 14, 16, 17, 22, 23, 24 and 25); 2) Concern about food and NB - Refers to episodes of compulsive ingestion, purging and other weight control techniques (Items 3, 4, 8, 18, 21 and 26); 3) Oral control - Demonstrates self-control over food and recognizes social forces in the environment that stimulate food intake (Items 2, 5, 9, 13, 15, 19 and 20). Subsequently, we recoded each item from 0 to 3 points: Always - 3; Almost always - 2; Often - 1; Sometimes, Rarely and Never - 0. The total score varies between zero and 78.

We considered the value equal to or higher than 20, in the total score, as a cut-off point for severe changes in eating disorders, with scores greater than or equal to 10 and less than 20 being indicators of moderate changes in eating disorders and less than 10 indicators of normal eating behavior (Silva et al., 2014).

2.3. Procedures

In order to collect data, a request for authorization was made to carry out the study to the Directorate-General for Education (Portugal), which gave a favourable opinion (n°. 0549400001 of 2016 September 07) and the Director of the School, who also authorized. Then we met with the Coordinating Teacher of the School's Health Education Project (HEP), who was informed about the study. They have been asked to cooperate to carry it out and agreed with the data collection procedure. The HEP coordinator articulated with the teachers in each class. On the scheduled dates the team of researchers went to school and distributed the questionnaires, which were completed by the students in the classroom and evaluated the weight and height of each student, in their own space and with adequate equipment. The data collection period ran from October 16 to November 18 2016. Ethical principles were respected in accordance with the Helsinki Convention.

The data processing was made by SPSS Software (22.0). We used descriptive statistics, with absolute and relative frequency and mode calculations for all variables and the mean and standard deviation for the variables of measurement level ratio. We also used inferential statistics, using "t"



test to compare the mean score of EAT26 and each one of the three subscales of EAT26 and gender and ANOVA test to compare the same scores with age groups. We also verified whether there were significant differences between the proportions of the three categories of EAT 26 and gender, as well as between age groups. We considered the 5% as a level of significance (Marôco, 2014).

3. Presentation and discussion of results

Of the total number of participants (n = 765), 21.6% had moderate eating disorders and 8.0% had severe eating disorders. The proportion of moderate eating disorders was slightly higher in females and almost coincided with severe eating disorders. In age groups, the proportion of moderate eating disorders decreased with the increasing of age, but in severe eating disorders the evolution was not linear. We observed a decrease in the proportion of severe eating disorders from 11-12 years old group, which obtained the highest percentage, to the 13-14 age group, then increasing in all age groups until the older group.

We did not find significant statistical differences between the proportions of the ETA26 categories of the two genders (χ^2 : p> 0.524) (**Table 2**).

Relationship between the proportions of EAT26 categories and gender (n= 365)										
Variables	Gend	er (%)	Total	Test value	df	р				
	Male	Female								
EAT26 Categories										
Normal Food Behaviour	72,0	68,7	70,4	$\chi^2 = 1,294$	2	0,524				
Moderate Eating Disorders	20,0	23,4	21,6							
Severe Eating Disorders	8,0	7,9	8,0							

Table 2

We did not find statistically significant differences between the proportions of the categories of ETA26 scale of the age groups (χ^2 : p> 0.888) (**Table 3**).

Table 3

Relationship between the proportions of EAT26 categories and age group (n = 365)

Variables		0	oups (% 7 15-16Y	6) 7 17-19Y	Total	Test value	df	р
EAT26 Categories Normal Food Behaviour Moderate Eating Disorders Severe Eating Disorders	66,7 23,5 9,8	70,4 22,6 7,0	70,9 21,8 7,3	72,2 18,8 9,0	70,4 21,6 8,0	$\chi^2 = 2,119$	6	0,888

The proportion of eating disorders in the present study (29.6%) is much higher than the obtained by Silva et al. (2014), who carried out a study with a sample of 157 Portuguese children and youngsters, from 6 to 12 years old, in the north coast of Portugal, which was 9.0%, perhaps because it is a much younger sample. However, the proportion of changes in eating disorders in our study is much lower than that obtained by Pinheiro & Jiménez (2012), in a study involving 347 Brazilian adolescents (Maranhão State), aged between 8 and 12 years old, which were 43.5%, but slightly higher than the one obtained by Ludewig, Rech, Halpern, Zanol & Frata (2017), with a sample of 323 Brazilian adolescents (Rio Grande do Sul state), aged between 11 and 15 years old, which was 21.7%. This percentage gap can be explained by the cultural differences between the samples and because our sample includes older students.

The mean overall score, subscale "Diet", "Food Concern and Bulimia" and "Oral Control" were respectively 8.46 ± 8.422 , 3.07 ± 4.625 , 3.22 ± 2.792 and 2.17 ± 5.96 points.

The study by Silva et al. (2014) obtained a global mean of subscale "Diet", subscale "Concern for food and bulimia" and subscale "Oral control", respectively, 13.2, 8.5, 1.5 and 3.5 points, all higher than those obtained in our study, except in the subscale "Concern about food and bulimia". This means that the students in our sample had fewer eating disorders on the global scale and in all subscales, except in the subscale "Concern about food and bulimia".

There were no statistically significant differences between the EAT26 global score (t: p > 0.692) and the "Diet" subscales (t: p > 0.927) and "Oral Control" (t: p > 0.291) between genders.

The subscale score "Concern for food and bulimia" differs significantly between genders (t: p < 0.043), with the female mean being higher (3.44 versus 3.03 males), that is to say, have more bulimia-related eating disorders than men (**Table 4**).

Table 4 Relationship between the score of EAT26 and subscales and gender (n=365)					
Variables	n	Mean	Test value	df	р
Global Score EAT26 X Gender					
Male	410	8.34	t= - 0.396	763	0.524
Female	355	8.59			
Diet Score EAT26 X Gender					
Male	410	3.05	t= - 0.092	763	0.927
Female	355	3.08			
Bulimia Score EAT26 X Gender					
Male	410	3.03	t= - 2.029	763	0.043
Female	355	3.44			
Oral Control Score EAT26 X					
Gender					
Male	410	2.26	t= 1.056	759.86	0.291
Female	355	2.07			

There were no statistically significant differences between the overall EAT26 score (ANOVA: p > 0.720) and the subscale "Diet" (ANOVA: p > 0.243), subscale "Concern with food and bulimia" (ANOVA: p > 0.094) and "Oral control" subscale (ANOVA: p > 0.792) among age groups (**Table 5**).

These results are in agreement with those obtained in the study by Ludewig et al. (2017), in which the authors also did not find significant statistical differences between genders and age groups. The same happened in the study by Pinheiro & Jiménez (2012), in which there were no significant differences regarding to gender.

Relationship between the score of EAT26 and subscales and age group (n=365))
Variables	n	Mean	Test value	df	р
Global Score EAT26 X Age					
Group					
11-12 Years	102	8.77	ANOVA=	764	0.720
13-14 Years	226	7.92	0.446		
15-16 Years	261	8.71			
17-19 Years	176	8.58			
Diet Score EAT26 X Age Group					
11-12 Years	102	2.80	ANOVA=	764	0.243
13-14 Years	226	2.63	1.397		
15-16 Years	261	3.30			
17-19 Years	176	3.44			
Bulimia Score EAT26 X Age					
Group					
11-12 Years	102	3.83	ANOVA=	764	0.094

 Table 5

 Relationship between the score of EAT26 and subscales and age group (n=365)



13-14 Years	226	3.23	2.138		
15-16 Years	261	3.11			
17-19 Years	176	3.00			
Oral Control Score EAT26 X Age					
Group					
11-12 Years	102	2.15	ANOVA=	764	0.792
13-14 Years	226	2.07	0.346		
15-16 Years	261	2.30			
17-19 Years	176	2.14			

4. Conclusion

The sociodemographic pattern of the students participating in this study is characterized by the fact that it is mainly composed by male students, between 15 and 16 years of age, who attend high level of education.

The prevalence of changes in eating behavior obtained in the present study (29.6%), is much higher than in the study carried out in Portugal and it is located between the two studies conducted in Brazil with younger children. However it is already a considerable percentage.

We did not find any relation between the categories of the EAT26 scale nor between the EAT26 scale score and the variables gender and age group. Only the subscale score "Concern about food and bulimia" is related to gender, being the female gender that presents the most changes related to this subscale, which should be considered in the interventions directed to this population in this scope.

The main limitation of this study is that it is an accidental sample, which may have implications for the representativeness and inference of the sample for the population. The other limitation is that it is a cross-sectional study that does not allow the establishment of cause-effect relationships.

The study may contribute to more targeted and effective interventions of the School Health team, in this geographical area, who will have a better knowledge of this population (students attending the school) and, specifically, in the field of eating disorders, so that the team can prevent the appearance of more serious situations.

5. References

- Antunes, B., Pinho, A.C., Peralta, K., Rodrigues, D., Martins, E., Mendes, F. et al. (2015). Comportamento alimentar restritivo e excesso de peso em jovens portugueses. Viseu: Escola Superior de Educação de Viseu.
- Cardoso, S.M.M. (2017). Escolhas alimentares e de atividade física: fatores moduladores das opções dos adolescentes. Tese de Doutoramento não publicada, Universidade Nova de Lisboa, Escola Nacional de Saúde Pública, Lisboa.
- Cordoni, J.K., Silva, J.B., Reato, L.F.N., Brito, N.C., & Mistura, L.P.F. (2016). Eating behavior and adolescence. Adolesc. Saude, 13(1): 72-76. Retrieved from http://www.adolescenciaesaude.com/detalhe_artigo.asp?id=571
- Dunker, K.L., & Philippi, S.T. (2003). Food habits and feeding behaviour in adolescents with symptoms of anorexia nervosa. Rev. Nutr., 16(1): 51-60. Retrieved from http://www.scielo.br/scielo.php?pid=S1415-52732003000100006&script=sci_abstract&tlng=pt
- Fortin, M.F., Côté, J., & Fillion, F. (2009). Fundamentos e etapas do processo de investigação. Loures: Lusodidacta.
- Lofrano-Prado, M.C., Prado, W.L., Piano, A., & Dâmaso, A.R. (2011). Obesity and eating disorders: the coexistence of extreme eating behaviors in adolescentes. ConScientiae, 10(3): 579-585. Retrieved from

http://www4.uninove.br/ojs/index.php/saude/article/viewArticle/2559



- Lwdewig, A.M., Rech, R.R., Halpern, R., Zanol, F., & Frata, B. (2017). Prevalence of symtoms for eating disorders in school children aged 11 to 15 years of the municipal school system of the city of Nova Petrópolis. Revista da AMRIGS, 61(1): 35-39. Retrieved from http://pesquisa.bvsalud.org/portal/resource/pt/biblio-849162
- Marôco J. (2014). Análise estatística com o SPSS Statistics. Pêro Pinheiro: Report Number.
- Nunes, M., Camey, S., Olinto, M., & Mari, J. (2005). The validity and 4-year test-retest reliability of the Brazilian version of the Eating Attitudes Test-26. Brazilian Journal of Medical and Biological Research, 38(11): 1655-1662. Retrieved from http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0100-879X2005001100013
- Pereira, C.M., Silva, A.L., & Sá, M.I. (2015). Fatores que influenciam os comportamentos alimentares. Questionário das escolhas alimentares dos adolescentes. Psicologia, Saúde &Doenças, 16(3): 421-438. Retrieved from http://www.scielo.mec.pt/scielo.php?script=sci_arttext&pid=S1645-00862015000300012
- Pinheiro, N., & Jiménez, M. (2012). Translation and validation of the Brazilian version of the childrens' Eating Attitudes Test (ChEAT). Psicol. Argum., 30(70): 515-524. Retrieved from <u>https://periodicos.pucpr.br/index.php/psicologiaargumento/article/view/20387</u>
- Pinto, B.A.P. (2010). Atitudes e comportamentos alimentares: factores de risco em estudantrs universitários. Dissertação de Mestrado não publicada, Universidade de Trás-os-Montes e Alto Douro, Departamento de Educação e Psicologia, Vila Real.
- Radmanovic-Burgic, M., Gavric, Z., & Burgic, S. (2011). Eating attitudes in adolescent girls. Psychiatria Danubina, 23(1): 64-68. Retrieved from <u>https://hrcak.srce.hr/file/113628</u>
- Silva, D., Vaz, A., Rego, C., Dias, C., Azevedo, L.F., & Guerra, A. (2014). Evaluation of food attitudes and behaviours in obese children/adolescentes followed at the nutrition outpatient paediatric hospital vs. school community. Rev Port Endocrinol Diabetes Metab., 9(2): 11-115. Retrieved from <u>https://repositorio-aberto.up.pt/handle/10216/78536</u>
- Viana, V. (2002). Psicologia, saúde e nutrição: Contributo para o estudo do comportamento alimentar. Análise Psicológica, 4 (20), 611-624. Retrieved from http://www.scielo.mec.pt/scielo.php?script=sci_arttext&pid=S0870-82312002000400006
- United Nations Children's Fund, (UNICEF). (2011). *Situação mundial da infância. Adolescência, uma fase de oportunidades*. Geneve, Switzerland: ONU. Retrieved from https://www.unicef.pt/18/Relatorio_SOWC_2011.pdf.



Health Education: Kindergarten Teachers as Health Educators

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Introduction: Health Education is one of the major concerns of major world organizations. WHO, UNICEF, UNESCO and World Bank have agreed upon a core group of cost-effective components of health education which were: (1) School health, (2) Hygiene and (3) Nutrition. Four Components to be Made Available in All Schools including; "Skills-based health education" that focuses on the development of knowledge, attitudes, values and life skills needed to make, and act on, the most appropriate and positive decisions concerning health. **Objective:** Analytical investigation of the importance of Health Education as a selective subject of both undergraduate and postgraduate kindergarten students of faculty of Education, Helwan University. **Method:** Students of professional diploma in education (working as kindergarten teachers) and undergraduate students of kindergarten subdivision of faculty of education were the study sample. They reported individually their work in schools in their practical training periods. **Results:** Data were discussed in terms of national and international standards of both health and education.

Key words: Health Education, Child Health, Kindergarten Teachers.



Healthy and active aging in Lodz

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Abstract

Lodz is a city with 700 thousand inhabitants. About 25% of them are over 60 years old. To address problems of this population group the City started the "Active 60+" programme: a system of comprehensive actions addressed to senior citizens. It includes:

CENTRES OF ACTIVE SENIOR: health education, medical counseling, physical exercise, rehabilitation, classes in new technologies, cultural events.

PREVENTION OF DISEASES: vaccinations against flu and pneumococcus, consultations on cardiovascular diseases, health education, physical activity.

LEGAL ADVICE AND PSYCHOLOGICAL COUNSELING: free of charge consultations for seniors.

VOLUNTEERS 60+: providing peer information to seniors.

TELEPHONE HELPLINE FOR SENIORS: psychological and legal advice and information on activities.

THE INTERNET FOR OLDER ADULTS: training courses and workshops.

SENIORALIA: an annual, over a week-long cycle of events addressed to the older population, which includes: cultural events, medical examinations, sports activities, walks, shows etc.

BOX OF LIFE: contains vital information on the health status of its owner, medication applied, contact data.

ESSENTIAL GUIDE FOR THE RETIRED: basic information and meetings for newly retired people.

SENIOR'S ENVELOPE: regular written information on activities addressed to senior citizens.

CITY SENIOR CARD: allows to purchase goods or services at lower prices.

WEBSITE FOR SENIORS providing information on events and action addressed to the older population of the city.



With its population of about 700 thousand, Lodz is the third biggest city in Poland. It is the capital of a region (voivodship) with over 2,5 million inhabitants. Lodz is located in the central part of the country, about 100 km from Warsaw, the capital of Poland.

At the beginning of the 19th century Lodz became a strong centre of textile industry. In the second part of the century Lodz became "the promised land" for people from nearby small towns and villages. The number of inhabitants increased from 800 in 1820 to 480 000 in 1914. Owners of textile factories (German, Russian, Jewish) created whole 'small towns' around their factories and residences, with residential buildings for workers, schools, shops, health centers and churches.

After the economic transformation in the 1990s, large cotton, wool and textile factories collapsed, and Łódź entered the path of reform towards the development of other industries. Today, the focus is on modern technologies, electro technical industry, business services sector (BPO and IT) and creative industries.

The chief challenges of the city:

- collapse of large industrial factories
- structural unemployment
- degradation of urban space
- difficult socio-economic situation of inhabitants
- decreasing and aging population

The city of Lodz is a pioneer in the area of activities supporting health and quality of life of its inhabitants. In 1993 the city joined the WHO Healthy Cities Network, which confirms the city's commitment to health promotion, prevention of diseases, creating friendly living conditions and supporting groups with special needs.

Lodz is also involved in activities of the Polish Healthy Cities Association, which is located in our city. The Association has 40 members - local authorities active in an area of supporting health .

One of the challenges of Lodz is its aging population. At the moment about 25% of city inhabitants are over 60 years old. By the year 2020 people aged 60+ will make up 33% of the population of Lodz, the highest rate among big cities in Poland. In view of demographic prognoses and health status of the citizens of Lodz, the social strategy for the city chose prevention of exclusion of older adults as one of priority intervention areas.

In 2012 the City of Lodz established a Unit for Senior Affairs within the structure of the City Office, responsible for initiating and coordinating action addressed to the elderly inhabitants of Lodz. The action aims at enhancing participation of the senior inhabitants in public life, especially in the area of education, health, culture and sport. The Unit concentrates on supporting initiatives for seniors, networking, cooperation between the senior community and the City Office and other institutions, NGOs as well as the business sector.

The City Office started the "Active 60+" programme: a system of comprehensive action addressed to senior citizens which increases their chance to remain active or take up more active lifestyle. The aim of the programme is to stimulate the activity and improve the quality of life of the residents of Lodz aged over 60.

The programme for the elderly people in Lodz includes:

• establishment of information centres which also initiate and support action for senior citizens, including projects in the areas of culture, physical activity, education, health and development in its broadest sense;



- initiating and supporting inter-generation projects by engaging senior citizens in voluntary action for children, youth and other older adults;
- initiating action for senior citizens in all city districts by establishing Centres of Active Seniors, supporting Neighborhood Clubs of Seniors, Third Age Universities and NGOs;
- promotion of senior friendly action and projects;
- cooperation between institutions, public services, agencies, organizations, businesses and senior citizens.

DISTRICT CENTRES OF ACTIVE SENIORS

The Centres were created by the City Office as a starting point for the wider project "Active 60+". They are located in the already existing community culture centres in each of the five districts of the city. They offer regular activities for older adults: lectures of the Third Age Academy, physical activity, classes in new technologies, cultural events, legal advice and psychological counseling. The number of participants is about 46 thousand each year.

CITY SENIOR CARD

The project started in 2014 and is addressed to all residents of Lodz aged 60+. Since August 2016 the card is available also to people who do not live in Lodz, but are connected with the city Lodz by their job, family or other activities. The card is offered free of charge in the City Office (available in 7 locations in different parts of the city). It allows users to purchase goods or services at lower prices in partner institutions and companies which declared participation in the project. The project has about 180 partners who offer discounts and promotions in such areas as: health, sport and recreation, leisure, catering or shopping. At the moment the number of users is over 30 thousand.

60+ VOLUNTEERS

The project was a response to a growing interest of the residents in information on activities addressed to older adults. Many of them do not have access to the internet. The City initiated a system which helps to spread information about different events for seniors in Lodz in the area of sport, culture, health or education organized by the City and other institutions and organizations. The idea of the project is to create a group of senior leaders who meet once a month, get printed information on the above mentioned subjects and distribute it in the community of older adults in their neighborhood. Each meeting starts with a thematic lecture on different issues important and useful for the elderly people – for example meetings with lawyers on succession, with the city consumer rights advisor or with representatives of the National Health Fund on changes in access to health care or sanatoria. There is also information on possibilities of joining other projects as a volunteer.

About 200 people regularly attend each meeting. Since the beginning, almost 3000 people have participated in the volunteer meetings.

THE INTERNET FOR OLDER ADULTS

Since 2013 the City of Lodz has been organizing computer courses and workshops for the elderly people. They are conducted by volunteers. The City in cooperation with Medical University of Lodz provides space and equipment for the training. The training programme includes basic computer skills. Additionally seniors can attend monthly workshops on how to use the internet and find information on different websites. In 2017 almost 1000 participants attended computer courses and about 500 – thematic workshops.



SENIORALIA

SENIORALIA is an over week-long event organized in May addressed to the older population. It is organized in partnership with many institutions, NGOs and the private sector, including City Senior Card partners. The main purpose of SENIORALIA is to encourage people over 60 to conduct active lifestyle, get new knowledge, develop new hobbies and show where they can practice them. During SENIORALIA public transport is free of charge for users of the City Senior Card and additional discounts for services are offered by the Card partners.

The first edition of SENIORALIA was organized in May 2014. 70 institutions and NGOs were involved in organization of the event, over 250 activities were offered to participants, 15 thousand people took part in them.

The fourth edition (2017) lasted 15 days and offered 500 activities organized by 115 partners. Over 50 thousand inhabitants of Lodz took part in them. Activities were offered in 5 areas:

SPORT: Tai-Chi, Pilates, Water Trekking, Nordic Walking, cheerleaders workshops, walking

in the green spaces of the city, bike trips.

CULTURE: poetry readings with music, creative writing workshops, book crossing, a guided tour combined with a talk on literary themes.

HEALTH: free densitometry, eye examination, dental examination and counselling, hearing tests, cancer prevention education.

EDUCATION: cooking classes, intergeneration competition *What do you know about Lodz*, encaustic painting and handicraft workshops.

OPEN DOOR MEETINGS / COUNSELLING:

Lecture on succession law, visit at the police department and city waste recycling centre, counseling on building one's image, car servicing for 1 PLN, walk in the historical building of the city power plant. This year a new event will be organized in cooperation with the Medical University of Lodz: "GENERATION TREE" - national contest for NGOs, institutions and companies supporting healthy and active aging and improving the quality of life of the older adults. The final gala of the contest will end SENIORALIA.

TELEPHONE HELPLINE FOR SENIORS

This Project was implemented in cooperation with the SUBVENIO Foundation. Five days a week for 4 hours people can call and get information about activities for seniors and psychological and legal advice. The City provides space and the telephone line, the Foundation – volunteers (specialist and seniors) who provide information and advice. The number of users is about 800 a year.

BOX OF LIFE

Box of Life is a project addressed to older residents of Lodz, especially those who live alone. In cases of an urgent health problem when medical service is necessary, basic information about the health status of a person, regularly taken medicines and important contact details are available in a box stored in a visible and easily accessible place in a fridge marked with a special label. It may help in effective and fast medical treatment. Boxes of life with a form for necessary information, a label for the fridge and an instruction of use are distributed free of charge to older city residents in 10 places in different parts of Lodz. Since the begging of the project over 15 thousand Boxes of Life have been distributed.

LODZ GUIDEBOOK FOR SENIORS

Basic information useful to the elderly people in Lodz was published in the form of a guidebook which covers such areas as: health, social services, aging, disability, active life in



later years. The book contains concise information and contact details of organizations and agencies working in the above mentioned areas. It should help its users to find necessary information and conduct active life. The first edition was 3500 copies. They are available in Centers of Active Seniors.

The electronic version is available on the city seniors' website.

CITY SENIORS COUNCIL

The Council was established on the basis of the City Council resolution. It consists of 15 members aged over 60 nominated by organizations working for the elderly and elected in a voting system.

The Council is a consultation and advisory body to the city authorities and cooperates with the city in areas concerning the problems of the elderly people, such as:

- improving participation of seniors in public life

- prevention of their social exclusion
- supporting activities of the seniors
- housing for seniors
- prevention and health promotion
- breaking stereotypes about seniors

- building respect for seniors in the general population and improving intergeneration relations

- development and supporting physical activity, access to education and culture

The Council meets regularly and discusses the issues vital to older residents of Lodz. They also meet residents of the city at weekly consultation meetings.

SENIOR'S ENVELOPE – it is a convenient source of information about interesting ways of spending time for seniors. In a paper envelope people can find timetable for events, tours, lectures and workshops offered to senior citizens by the city, city's institutions and non-governmental organizations. It is issued regularly - every 2 or 3 months and printed in 20 000 copies. They are available in places frequently visited by the elderly (health care units, libraries, seniors' clubs, City Office buildings) and on the city website for seniors.

ESSENTIAL GUIDE FOR THE RETIRED - basic information and meetings for newly retired people to help them to find their role at the new stage of their life.

This initiative is based on cooperation with the Social Insurance Institution. It started in October 2017. To every new decision on granting a pension, the Social Insurance Institution attaches an invitation to an information meeting where participants can learn how they can spend time developing their interests, learning new things or starting another job (commencement of economic activity). Participants get information package including LODZ GUIDEBOOK FOR SENIORS, SENIOR'S ENVELOPE, Box of Life, and City Senior Card. Four such meetings have taken place, each of them attended by about 25.

LEGAL ADVICE AND PSYCHOLOGICAL COUNSELING - free of charge consultations for senior citizens available in 9 places in the city, most of them well-known to elderly people, like cultural centres or outpatient clinics. In 2017 over 250 customers used this service.

PREVENTION OF DISEASES

In 2008 the City started free **vaccination against flu**. Over 6000 people can use it free of charge every year. It is not enough but this action has also an educational aspect – it can encourage some people to buy vaccine by themselves.

In 2017 **pneumococcal vaccines** were offered to residents of Nursing Homes supervised by the City. Over 500 people made use of this offer.

Consultations on **cardiovascular diseases** were offered to inhabitants of Nursing Homes – over 258 people were invited, 182 came to meetings, 150 used individual consultations. Results: recognized cardiovascular disease – 76% but only 72% take medicines regularly, low physical activity – 73%, overweight or obesity – 71%, 50% - high blood pressure,

In 2017 the City started cooperation with NGOs which offer different activities to residents of nursing homes and day care centres: health education and physical activity.

CENTRE OF HEALTHY AND ACTIVE SENIOR is placed in an outpatient clinic connected with the City. It was opened in February 2018 and is available to seniors 5 days a week. It offers regular activities such as lectures, workshops on health issues, physical exercise and rehabilitation, computer classes, medical and psychological counseling, meetings with interesting people. There is also a cafeteria where seniors can have free coffee or tea together.

The Centre stimulates voluntary work of elderly people - a Telephone Helpline for Seniors works there and meetings of senior leaders are organized there.

The Centre space is also open for bottom-up initiatives: different meetings can be organized there and the space is available free of charge.

WEBSITE FOR SENIORS

The website was created by the City Office. It provides information useful for older adults about on-going action dedicated to them but also about occasional events and action in the city. The Unit for Senior Affairs is responsible for updating the website which is used by about 50 thousand people a month.

MUNICIPAL DAY CARE CENTRE

In April 2018 a new Day Care Centre was established. It is based in a city hospital with a geriatric ward. The Centre can offer 50 places for people who do not need hospital care but rather day care and rehabilitation and should not stay at home alone.

It is open from Monday to Friday from 7.30 am to 5 pm and offers the users three meals. The users are driven to the Centre by their regular care givers. They can use the services of the Centre for a time of several weeks to two months, depending on the time required by the rehabilitation process. The services of the Centre are free. They include occupational therapy physical rehabilitation, sensory re-education, oxygen therapy and even amusement games. All rooms of the Centre are barrier free.

CONCLUSION

Implementation of the project increases social awareness, highlights problems which result from the process of aging of the population of Łódź and helps to break stereotypes of old age and negative attitudes to senior citizens. It encourages senior citizens to take part in educational and cultural projects and other forms of activity, helps them to fully participate in the life of the city and strengthens bonds between generations.

In 2017 the City worked out the Lodz Demographic Strategy which will help to coordinate activities supporting healthy and active ageing by activities of different sectors of the city life. It confirms commitment of the City Authorities to supporting elderly people in Lodz.







Men are Playing a Vigorous Role to Empower the women in rural districts of Bangladesh on Sexual Reproductive Health and Rights (SRHR)

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Abstract:

Reproductive health requires "that people are able to have satisfying and safe sex life and that they have the capability to reproduce and the freedom of choice when and how often to do so. Considering SRHR, safe MR and Choice of FP a study was conducted in five rural districts of Bangladesh under Nirapod-2 project funded by the Embassy of the Kingdom of the Netherlands.

The baseline report of Nirapod-2 stated that 41% of men in project areas aware of where to access safe MR/MRM whereas the mid-term evaluation stated it was 79.5%. The baseline report also mentioned 48% of men agreed that women has rights to take decision on FP whereas mid-term evaluation revealed that 88.8%. The proportion of correct timing for safe MR/MRM among men in baseline survey was 28.2% whereas in mid-term evaluation it was 56.3%. From the baseline survey it was found that the proportion of awareness of long acting permanent methods among men is lower than the mid-term evaluation.

The findings of this study which involved 800 Male Community Support Group (MCSG) members. These MCSGs disseminated information among 64,045 men in project areas on SRHR, FP, safe MR/MRM, safe motherhood and empowerment of women.

Key words: Men involvement, Sexual health, Reproductive health, FP and SRHR



Research Objectives:

- To assess the awareness of men on SRHR in five rural districts of Bangladesh.
- To determine men's role on empowering women in five rural districts of Bangladesh.

Proposed Methodology:

Under Nirapod-2 project the study was conducted in five districts of Bangladesh these are Barguna, Patuakhali, Khulna, Noakhali and Lakshmipur. The project is collaborated by 04 partner organization; Marie Stopes Bangladesh (as lead), Shushilan, BAPSA and Phulki (consortium partners) to empower women on SRHR and family planning services for married women and men. This study used a mixed method approach. Both quantitative and qualitative methods of data collection were used. Total respondents were 800 male community support group. The data was collected during 01 to 31 August 2017. The data was collected by the research team members of RTM International of the respective districts. They interviewed the male community support group members. Before the data collection and focus group discussion, the project staffs were trained by Marie Stopes Bangladesh and RTM Int. for this assessment procedure and data collection. RTM Int. was also responsible for data entry and analysis through the SPSS software. After finishing data analysis, incorporating feedback of consortium partners RTM Int. prepared a report for Marie Stopes Bangladesh and Nirapod-2 project management.

Discussion:

In this study the level of awareness of modern family planning methods by men was high. Mid-term evaluation report revealed that 79.5% of men in project areas were aware of where to access safe MR/MRM and 88.8% of men agreed that women should make decisions on selected family planning methods. In every aspects of life of women, men are playing a vital role to empower women in these rural districts of Bangladesh.

The BDHS 2014 stated that, women can participate in decision making in four specific types such as women's won health care, making major household purchases and visit to the women's family or relatives. The report also mentioned that about three in ten currently married women stated that their husbands were the main decision makers about their healthcare, making major household purchases and visit to the women's family or relatives. In this study we have found that in Noakhali highest proportion of women can make decision to go to relatives' house compare to other districts of Nirapod-2. However, regarding decision making on family planning Patuakhali was the highest.



References:

- 1. Health Organization. Sexual and reproductive health.http://www.who.int/reproductivehealth/topics/sexual_health/shdefinitions/en/ (accessed 20 May 2018).
- Mitra and Associates Dhaka, Bangladesh. Bangladesh Demographic & Health Survey. Bangladesh: 2014. https://dhsprogram.com/pubs/pdf/FR311/FR311.pdf (accessed 31 May 2018)
- 3. Baseline Survey Report of Nirapod-2 (Unpublished)
- 4. Mid-term Evaluation Report of Nirapod-2 (Unpublished)



OCCUPATIONAL STRESS AND QUALITY OF WORKLIFE AMONG STAFF NURSES IN A LEVEL 1 PRIVATE HOSPITAL IN PADADA, DAVAO DEL SUR

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ABSTRACT

Nurses as the major group of health service providers need to have a satisfactory quality of worklife to give desirable care to the patients. Thus, the purpose of this study is to determine the relationship of occupational stress on the quality of worklife of nurses. In doing so, the study employed the descriptive-correlational design involving all employed nurses of a Level 1 Private Hospital in Padada, Davao del Sur. Mean, Pearson product moment correlation *r* coefficient and multiple linear regression analysis were used as statistical tools. Results revealed that the nurses experienced occupational stress most of the time (\bar{x} =2.75). In addition, workload has the highest mean score (\bar{x} =3.35) among the sources of occupational stress, while conflict with other nurses was found to have the lowest (\bar{x} =2.36). The nurses have a moderate quality of worklife in the overall level (\bar{x} =3.03) while home-work interface have the lowest mean score (\bar{x} =2.49). Correlation analysis revealed that conflict with physicians, lack of support, workload, and uncertainty concerning treatment have significant, negative relationships with quality of worklife. Lastly, workload is the only predictor of the quality of worklife of the nurses.

Keywords: Health, Occupational Stress, Quality of Worklife, Descriptive-Correlation, Davao del Sur



CHAPTER 1

INTRODUCTION

Background of the Study

Nursing has changed significantly in the last years with the promotion of higher standards of care, professionalism, and advanced educational attainment. This development may have resulted in increased stress levels for nurses. Work pressures are seen as part of everyday life for health professionals. With this, responding to stress becomes a mismatch between the perceived demands and the ability of the individual to cope with these demands. Such nature of the nursing profession has a spillover effect towards the quality of worklife of the nurses especially among the private sectors.

According to the World Health Organization (WHO) in 2012, 90% of the world population is affected by stress because we live in a time of great demands to be updated and the constant necessity of dealing with new information. This growing concern is strongly present in the nursing field, which is considered by the Health Education Authority in Canada as the fourth most stressful profession in the public sector.

In Canada, the health needs of Canadians will continue to change based on current trends. By 2022, Canada will be deficient by almost 60,000 of full-time equivalent nurses. Nurses across the country are reporting increased stress and dissatisfaction with nursing, with job-related stress being one of the principal reasons that nurses change jobs. It has been noted that with increased job stress comes lower job satisfaction and higher turnover intention (Toh, S.G., 2011).

In Brazil, self-rated health among nurses was increasingly used as an indicator in international epidemiological studies as a proxy for the "real" or "objective" state of health, and consistently predicts the individual's mortality and decline in functional health. Various studies have shown the association between socio-economic condition and the presence of chronic illnesses with self-rated health, that nurses' quality of worklife has been marred by stress sources in their functions. This, then, leads to a lot of consequences such as burnout, absenteeism, loss of commitment to the hospital organization, and ultimately, attrition (Bauer et al., 2010).

It has been manifested in the Philippine context that nurses suffered increased workloads as reported by the day shift nurses. Working day shift was reported to be more physically demanding by nurses as it entailed bathing and lifting of patients. These nurses also reported that there was more administration work during the day shift in comparison to night shift. Other occupational-related concerns raised by the nurses include musculoskeletal pain backache, budget constraints, burnout and increased workload due to staff shortages. This means that nurses' occupational-related injuries and illnesses long work hours affect their well-being in the workplace (De Castro et al., 2010).

Work had an important role in individuals' social lives. It provided the support for a regular income, opportunities and personal growth, social identity and self-esteem. But it can have consequences for the worker's health. Such problem was experienced by most hospitals including the Level 1 Private Hospital in Padada, Davao del Sur. The hospital being studied faces certain difficulty of retaining best nurses due to the stressful nature of work it has. Problems such as just compensation, work relationships, longer hours of shift, and opportunities



of greener pasture outside the profession besides the decreasing levels of quality of life at work, confront the nursing service administration to retain its competent nurses who will assist the hospital in clinical needs. It has been observed that there was a rise in staff nurse turnover rates from 13.5% in 2014 to 17.2% in December 2015 as per record of the Human Resource Department.

Occupational stress has been a long-standing concern of the health care industry. This has confronted every hospital and medical organization for decades. To date, no study has been conducted to assess the occupational stress and quality of worklife among nurses especially in a private setting in Davao del Sur. Thus, this study was conducted. The study aimed to determine the level of occupational stress and the quality of worklife among staff nurses in <u>revel</u> 1 Private Hospital in Padada, Davao del Sur.

Review of Related Literature

This section includes the review of related literature and studies, which pertains to the relationship between occupational stress and quality of worklife of nurses.

Occupational Stress

Occupational stress is happening in hospitals for being unable to find enough nurses willing to work under current conditions in inpatient settings. A study conducted by Aiken et al. (2010) supports this assertion. The researchers conducted a cross sectional study of seven hundred (700) hospitals across five countries and involved 43,329 nurses from Canada (17,450), England (5,006), Germany (2,681), Scotland (4,721), and the United States (13,471). It was an international collaborative effort and investigators developed a questionnaire dealing with perceptions of nurses with respect to their working environments and quality of nursing care, job satisfaction, career plans, and attitudes regarding job stress.

Results showed that low morale, job dissatisfaction, and intent to leave their twenty (20) employers were common across the five nations. A clear majority of Canadian nurses (63.6%) reported the number of patients assigned to them increased in the past year, which is particularly disturbing given the widely reported rise in patient acuity levels in an aging Canadian population. These findings imply that, in addition to having responsibility for more clients, staff nurses may also have to take on more responsibilities for managing services and personnel at the unit level, which takes time away from direct patient care and increases their levels of job stress.

In the study of Al-Makhaita et al. (2014), it was found out that there is a demonstrated high prevalence of work-related stress among the studied nurses in both primary and secondary health care levels. In addition, the results of the study showed that such high level of work-related stress can be significantly seen if analyzed by demographic factors. They further noted that high level of work-related stress can be addressed using appropriate strategy in health care organization to investigate stress management in health care settings. Moreover, interventional programs to identify, and relieve sources and effects of stress should be developed including more training, support, and better work conditions.

Numerous studies have shown that nursing is strenuous work and, hence, occupational stress is prevalent among nurses, impacting their quality of work life. Specifically, occupational stress is a major health problem for both nurses and organizations and can lead to burnout, illness, job turnover, absenteeism, poor morale, and reduced efficiency and performance. Shader



et al. (2010) found that occupational stress results in increasing turnover rates and leads to more nurses leaving the nursing profession. Moreover, a high level of occupational stress and burnout has been found to reduce nursing practice quality. The definition of nursing practice quality mirrors the skills and expertise required by health practitioners who work in areas where distance, weather, limited sources, and lack of health human resources influence the character of the lives and professional practice. This development is deemed to be one of the reasons why fewer young people are entering the nursing profession.

Nirmanmoh B. et al. (2011) carried out a hospital based cross sectional study on occupational stress among nurses from two tertiary care hospitals in Delhi. Samples were eightyseven (87) randomly selected staff nurses. Data was collected using self-administered questionnaire on stressors in daily life and at workstation and socio demographic profile. Results revealed (87.4%) of nurses reported occupational stress. Highly stressful sources were Time Pressure, handling various issues simultaneously such as work situation and responsibilities. High level of skill requirement of the job was the most important stressor directly related to nursing profession. The study concluded as high prevalence of stress found among nurses and suggests that the need for stress reduction programs targeting specific important stressors.

Moustaka, E. (2010) investigated a study to assess sources and effects of Work-related stress in nursing at Thrace, Europe. Method of this study using web sites for reviewing various publications and abstracts around the exact theme stress, occupational stress, and nursing. It results that a number of aspects of working life are link with stress, namely work overload and role-based factors such as lack of power, role ambiguity, and role conflict. Threats to career development and achievement, including threat of redundancy, being undervalued and unclear promotion prospects are stressful. Stress is associated with reduced efficiency, decreased capacity to perform, a particular type of hospital unit, stress arises from the physical, psychological, and social aspects of the work environment. High levels of stress adversely affect patient care.

Death and Dying

In the study of Peters, L. et al. (2013) entitled "How Death Anxiety Impacts Nurses' Caring for Patients at the End of Life: A Review of Literature", attitudes are formed as a result of a favorable or unfavorable evaluation of a person, object, or thing and are expected to change over time and with experience. The fear of death is a universal phobia experienced by humans, with societal preference strongly advocating the preservation of life in many fields, such as in medicine. Individuals have their own attitudes towards death influenced by personal, cultural, social and philosophical belief systems that shape a person's conscious or unconscious behaviors. These attitudes are attached to human emotions, which are in turn attached to actions taken towards the object of the emotions in this case, death. Exposure to the processes accompanying the death of others makes individuals conscious of their own mortality, giving rise to anxiety and unease – although how these issues are related is complex. Thus "death anxiety" may be experienced, which is described as a 'negative emotional reaction provoked by the anticipation of a state in which the self does not exist' accompanied by feelings of fear or dread. It is proposed that one reason for a degree of apprehension may be the "unknowable"- what really happens beyond death. These emotional factors experienced by nurses may influence how a nurse cares for a patient in the terminal stages of the patient's life.



Conflict with Physician

According to Patton, C.M. (2014), direct patient contact to health care employees such as physicians, nurses, and technologists work in complex, stressful environments are prone to conflict. Though some of this conflict may result in positive outcomes, much will have the opposite effect. Dysfunctional conflict has the potential to negatively affect the health care workplace on a variety of levels, including impacting the quality of patient care, employee job satisfaction, and employee wellbeing. Therefore, it would behoove hospital managers to learn to recognize the precursors to conflict in order to prevent any ill effects. The purpose of this literature review is to offer an overview of the antecedents and effects of conflict among health care workers. Both positive and negative effects of conflict are addressed.

In the exhortations of Alhusaini (2010), who reported that in his study of nurses in Saudi Arabia that nurses were found to be dissatisfied with the relationship with their co-workers, especially physicians, where they experienced low levels of respect, appreciation and support. Additionally, they had poor communication and interaction with physicians.

Leever et al. (2010) conducted an explorative qualitative study of the medical staff and nurses on one hospital ward. The authors relay that expectations of "communication, mutual respect, professionalism, climate of collaboration, and quality of care" varied among the participants. Conflict, they discovered, "came about through a lack of compliance between the above-mentioned expectations and reality".

Frederich et al. (2010) discuss a case of value differences resulting in micro-level conflict within a hospice inpatient unit. Physician-nurse conflict arose when a nurse refused to follow a physician-prescribed order to administer a potent sedative to a 47-year-old patient. The physician, the patient and the patient's wife had earlier agreed to initiate controlled sedation to the patient, who was seeking to hasten death. A nurse who worked during the previous shift felt uncomfortable with the order as well because it seemed excessive at that point in the patient's disease progression. Health care workers are able to refuse patient care assignments when they are "ethically or morally opposed to interventions or procedures in a particular case". The polarity of values on the hospice unit created conflict among the physician, the nurses, the patient, and the patient's family.

Inadequate Preparation

In the study of Kamal, S. (2014) entitled "The effect of nurses' Perceived Job Related Stressors on Job Satisfaction in Taif Governmental Hospitals in Kingdom of Saudi Arabia", aimed to determine the main nurse's perceived job related stressors and its relationship with job satisfaction in Taif governmental hospitals in Kingdom of Saudi Arabia. A descriptive correlational cross sectional study was carried out on a convenience sample of one hundred forty-eight (148) nurses using expanded nursing stress and job satisfaction scales. The results have shown that the least stressful subscale was "Inadequate preparation to deal with emotional needs of patients and their families (Feeling inadequately prepared to help with the emotional needs of a patient's family, being asked a question by a patient for which I do not have a satisfactory answer, Feeling inadequately prepared to help with the emotional needs of a patient's usgested that staff nurses were avoiding emotional demands of the patients as evidenced by least mean (N=148, Mean = 2.42) for the inadequate preparation to



meet emotional need of the patient). Factor of the intense emotional support that is needed for the patient and family is yet another burden of stress placed on nurse.

Lack of Support

MacKusick, C.I. (2010) conducted a study entitled "Why Are Nurses Leaving? Findings from an Initial Qualitative Study on Nursing Attrition". Most participants felt a lack of support in the workplace at many levels, and these registered nurses were most troubled when the lack of support arose from their peers. This also extended vertically to feelings that management and physicians did not support the registered nurses in clinical practice. Moral distress has been identified as pervasive problems that may lead to job dissatisfaction, nurse burnout, and nursing attrition. Study participants originally believed they could make a valuable contribution through clinical nursing, yet they believed they never could return to nursing practice in that context. All the nurses expressed guilt about not working clinically, but none were willing to return to clinical practice. A lack of support is a primary reason for nurses to leave professional practice. Lack of support and moral distress all have been documented subsequently as associated with job dissatisfaction and nursing attrition The findings from the current study also suggest retention efforts should focus on work environments, including recognizing and then eliminating vertical indifference. The combination of these two elements ultimately led interviewee to leave clinical nursing.

In the findings of Battu et al. (2014), who mentioned that lack of support are one of the major management-related issues that stress the nurses out. This failing relationship with coworkers then becomes a potential source of dissatisfaction and motivation on nurses, thus affecting their worklife, in addition with lack of participation in decisions made by the nurse manager, lack of recognition for their accomplishments, and lack of respect by the upper management.

Conflict with Other Nurses

According to De Dreu et al. (2010), conflict is distinct from other 'dark-side' constructs that exist including aggression, incivility, and bullying. Although these constructs share the fact that parties are interdependent and have opposing interests, values, or beliefs, conflict need not involve intent to harm another party and need not cause negative outcomes. Although it is recognized that conflict does have negative outcomes, particularly if based upon personality disagreements, one of the most important recent contributions of the conflict literature has been to enhance understanding of the conditions under which conflict exerts positive outcomes.

According to the study of Almost, J.M. (2010), results suggest that intragroup relationship conflict is stressful, no matter how it is managed. Relationship conflict produces negative emotional reactions in individuals such as anxiety, mistrust, or resentment, frustration, tension, and fear of being rejected by other team members. As a result, relationship conflict is hard to manage, leaving people with increased pressures and less ability to manage them. Core self evaluation had a negative direct effect on job stress, suggesting that an individual's core self evaluation may be more effective in reducing an individual's stress level than their ability to manage relationship conflict. Individuals who are well adjusted, positive, self-confident, and efficacious with a strong belief in themselves are able to use effective coping mechanisms when managing stressors such as conflict, and subsequently are able to reduce their level of stress.

Intra-group relationship conflict was directly and positively related to job stress. Nurses who reported high levels of intragroup relationship conflict were more stressed in their job,



which included being upset by something happening unexpectedly, feeling nervous and stressed, feeling overwhelmed by difficulties at work and not feeling on top of things at work. These results are consistent with numerous other studies which have found that conflict has been identified as a source of stress within nursing work environments.

Several studies have also found that relationship conflict produces frustration, tension, and job stress. When compared to conflict with patients or doctors, nurses report that conflict with other nurses is the most stressful and leads to increased anxiety, emotional strain and physical strain. Nurses who are highly stressed are more likely to report lower levels of job satisfaction, organizational commitment, and higher intent to leave their job. When individuals are upset with one another, they experience negative emotions, which, in turn, lead to personal frustration and job dissatisfaction.

Workload

In the study of Hui Min Thian, J. et al (2015) entitled "Relationships among Stress, Positive Affectivity, and Work Engagement among Registered Nurses", aimed to identify sources of work stressors among registered nurses and examine the interrelationships among stress, positive affectivity, and work engagement. A descriptive- research design was conducted. A sample of one hundred ninety-five (195) full-time nurses was recruited from a tertiary hospital in Singapore. Data were collected via self-reported questionnaires and then analyzed using descriptive statistics and path analyses. Work stressors experienced by most nurses were workload, time pressure, inadequate reward, inadequate patient interaction, and unmanageable emotional demands of job. Positive affectivity had a significant negative relationship with stress in the past month but had a significant positive relationship with three components of work engagement. Worksite interventions may be developed to help nurses manage stress. Findings suggested that the most frequently-reported stressor for nurses was work overload. This may be because nurses working in general wards in Singapore provide direct care to patients with diverse health conditions, prepare patients for various investigation and treatment procedures, deal with patients' and families' emotional problems, complete abundant paperwork, among others.

Workload has been demonstrated to be one of the most frequent stressors. In a study of one hundred two (102) nurses in a Chinese intensive care unit, excessive workload was the most frequently cited source of workplace stress. This was a result of the nursing shortage with fewer nurses to care for more patients. Workload, shift work, overtime, and covering for absent colleagues were the most common identified stressors in other studies. It was investigated and perceived occupational stress and related factors among public health nurses, and reported that personal responsibility and workloads were the major sources of occupational stress. Excessive workload was also included as a major contributor to stress among hospital based Brazilian nurses. Heavy workload may be due to the physically arduous work of nursing jobs, as well as due to organizational pressures when there is a nursing shortage. Lack of confidence and competence in the nursing role can have a synergistic relationship with workload, creating high stress scores (Li, J., 2010).

In the pronouncements of Chen et al. (2010), who reported in their study that about 81.2% of the nurses believed that they had high workload. They added that shortage in human resources and increase of nurses' workload act as pressure factors among nurses, which lead to professional and organizational desertion.



Uncertainty Concerning Treatment

The study of Mohite, N. et al. (2014) entitled "Occupational Stress among Nurses Working at Selected Tertiary Care Hospitals" assessed occupational stress among nurses working at tertiary care hospital. Job related stress increasingly large disorder among nurses stress has a cost for individual in term of health, wellbeing and for organization in term of absenteeism and turnover which indirectly affect quality of patient care. The study was conducted on one hundred (100) staff nurses. Modified expanded nurses stress scale was used and requires 15-30 minutes to salve for each questionnaire. Majority (49%) of nurses had reported frequent occurrence of stress, due to uncertainty of concerning treatment. Whereas maximum (48%) of nurses had reported frequent occurrence of stress which could have negative impact on organizational climate in the future. Out of all considered causes of stress, uncertainty of concerning treatment factor is the responsible for frequent occurrence of stress among majority of nurses. Special measures to address the source of stress to improve their performance and hence will positively affect on quality of care given to the patients.

Quality of Worklife

Bhuvaneswari et al. (2013) in their article examined the Quality of worklife among employees in Neyveli Lignite Corporation Limited, Tamilnadu. The findings revealed that majority of the respondents are satisfied with their job, nature of job, salary, co-operation with colleagues, training and development, freedom to work, rewards & recognitions, social & cultural programs, health, safety & welfare measure and quality of worklife. It was also found out that all the employee benefits and other facilities show above neutral on satisfaction.

Nayeri et al. (2011), who found out in a study involving 360 clinical nurses working in the hospitals of Tehran University of Medical Sciences that quality of worklife is at a moderate level among 61.4% of the participants, and that only 3.6% of the nurses reported that they were satisfied with their works. None of those who reported the productivity as low reported their work life quality to be desirable. They have suggested, considering the results, that managers should adopt appropriate policies to promote the quality of worklife and productivity.

Chib, S. (2012), conducted a study on quality of worklife and organizational performance at work place of a private manufacturing unit, Nagpur, India through a structured questionnaire containing thirty one (31) items related to six (6) variables, organizational performance, job satisfaction, quality of worklife, wage policy, company policy and union policy. The researcher has formulated two models, one is organization performance depends on quality of worklife, job satisfaction, wage policy, company policy and union participation and the other one is quality of worklife which depends on organization performance., job satisfaction, wage policy, company policy and union participation. The collected data were analyzed using simple percentage, regression and correlation analysis. The study revealed that both the models stand true and quality of worklife had significant relationship with organizational performance.

Job and Career Satisfaction

In the study of Chinomona, R. (2010) entitled "The Influence of Quality of Work Life on Employee Job Satisfaction, Job Commitment and Tenure Intention in the Small and Medium Enterprise Sector", employee job satisfaction and job commitment are essential in implementing higher performance work systems that contribute to a company's financial performance. However, financial performance cannot be sustained unless the non-financial underpinnings of



employee job satisfaction, job commitment and hence productivity is improved. In this study, it is expected that when employees derive economic or socio-psychological satisfaction from their job, they will not contemplate leaving the company, but rather they will be motivated to stay longer. Economic satisfaction occurs for instance, when the employees are content with the reward system.

Hosseini, S. M. (2010) argues that career satisfaction, career achievement and career balance are not only the significant variables to achieve good quality of worklife but quality of worklife or the quality of work system as one of the most interesting methods creating motivation and is a major way to have job enrichment which has its roots in staff and managers' attitude to motivation category that is more attention to fair pay, growth opportunities and continuing promotion improves staff's performance which in turn increases quality of worklife of employees.

Ganguly, R. et al. (2010), the researcher aimed at the study of nature of the perceived quality of worklife of the university employees, the nature of their job satisfaction, the nature of association between quality of worklife and job satisfaction. The results indicate that the selected group of university employees perceived different aspects of their quality of worklife as either uncongenial viz. Autonomy, top management support and worker's control mainly or they have had a certain amount of dilemma to comment on a few other aspects such as personal growth opportunities and work complexity mainly bearing the potential involving a slight trend of negative opinion.

According to the study of Rubel, M.R.B. (2014) entitled "Quality of Worklife and Employee Performance: Antecedent and Outcome of Job Satisfaction in Partial Least Square", employees are the main drivers of the success of the perceived supervisory support is also found to organization. Organization having a satisfied workforce generates employee satisfaction and productivity can achieve and sustain the gaining position in the organization. The most interesting finding of this competitive market through exploring the performance of study is that employees of developing country like their employees. The result of the study indicated that supervisor behavior, compensation and benefits and work life balance all have positive significant influence on job satisfaction where compensation and benefits has the highest impact. On the contrary, job character is found having insignificant effect on job satisfaction. Last, job satisfaction was found positively and significantly related with employee in-role performance.

General Well - Being

Given the time and energy people spend at work, it is important that work be a place where people are generally satisfied and happy. Additionally, work affects not only the employee's physical but also the general well-being and general quality of worklife. Thus, employers and occupational health experts need to understand the components that comprise a healthy work experience (Requena, 2010).

Worrall & Cooper (2010) found in their recent survey showed that a lower level of wellbeing at work place was not good for organization. It leads to overall production loss and it increases in the long run.

Control at Work

In the study of Michie, S et al. (2010) entitled "Reducing Work Related Psychological ill Health and Sickness Absence: A Systematic Literature Review", it has revealed the following: key work factors associated with psychological ill health and sickness absence in staff were long



hours worked, work overload and pressure, and the effects of these on personal lives; lack of control over work; lack of participation in decision making; poor social support; and unclear management and work role. There was some evidence that sickness absence was associated with poor management style. Successful interventions that improved psychological health and levels of sickness absence used training and organizational approaches to increase participation in decision making and problem solving, increase support and feedback, and improve communication. It is concluded that many of the work related variables associated with high levels of psychological ill health are potentially amenable to change. This is shown in intervention studies that have successfully improved psychological health and reduced sickness absence. Of the two studies addressing sickness absence, one found a negative association with job demands, while the other found no association with control over work. Among other hospital workers, work overload and pressure, role ambiguity, lack of control over work, and lack of participation in decision making were all found to be associated with distress.

In the findings of Manzo et al. (2012), who verbalized that a certain degree of nurses' work dynamics partially explains the high percentage for the low freedom reported; that is, tasks are planned throughout the work shift, however, sometimes it is impossible to perform them due to the several interruptions (emergency situations, lack of staff, among others), causing nurses to feel powerless and consider having low control over work. A moderate quality of worklife as manifested in the dimension of control at work is means that the nurses feel somewhat comfortable making some decisions during the execution of tasks at the hospital. In this case, answers would be linked to the conception of control over the tasks performance, which can be understood or valued regardless of a broader definition of the work process (power relationships within the institution).

Home-Work Interface

According to the study of Vijaimadhavan, P. et al. (2013) entitled "An Empirical Study on Relationship among Quality of Worklife and its Factors" results revealed that work family interference is positively correlated to Family work interference (.642, p=.000) specific job purpose (.205, p=.000), motivation (.156,p=.0000) self efficacy (.139, p=.000) Interpersonal communication, (.111, p=.000) efforts by employer (.96, p=.000) at 5% level. This shows that the work/family interference and family/work interference are highly influential for women professionals. While other factors show very low but positive relationship. The findings were also supported by previous studies on work/family & family/work interference which shows that the strongest positive association of work home interference was with job demands.

Working Conditions

In the study of Rethinam, G. S. et al. (2010) entitled "Work Condition and Predictors of Quality of Worklife of Information System Personnel", the physical work condition was derived based on the interaction between the means of job demand and job control. Four types of physical work condition, namely, passive (low demand, low control), active (high demand, high control), low strain (low demand, high control) and high strain (high demand and low control) are described in the model. Whereby the physiological work conditions, namely, learning and stress are derived based on the consequences of the level of demand and control in work.

The contemporary Information and Communications Technology (ICT) work environment in Malaysia provides more meaningful work to the Information System (IS) personnel compared to the advanced countries. This is indicative of a positive physiological



work condition that applies the principles and practices of the concept of Quality of Worklife. It enables the Information System (IS) personnel in Malaysia to experience good Quality of Worklife. The constant review of the changes in the work condition factors due to the advancement in Information and Communications Technology (ICT) would enable the maintenance and enhancement of the existing level of Quality of Worklife. It is essential for the human resource practitioners to be alert to the changes of work environment in relation to Quality of Worklife. It is concluded that Information System (IS) personnel are enjoying their profession as they have substantial control and support in their job although the nature of their job is demanding. The selected work condition factors show that to some extent they have influence on Quality of Worklife. Organizational support, job control and job demand are the significant predictors of Quality of Worklife. Therefore, if these components of work environment are ignored by the management, there would have substantial impact on the Quality of Worklife of Information System (IS) personnel.

Occupational Stress and Quality of Worklife

According to the study of Nowrouzi, B. (2013) entitled "Quality of Worklife: Investigation of Occupational Stressors among Obstetric Nurses in Northeastern Ontario", the results suggest that place may be an important influence on the stress and quality of worklife of obstetrical nurses. Importantly, the nurses in Sudbury, the largest city with the largest participating hospital in the study were cross-trained in their practice of obstetrics. The nurses in the other three locations were not cross-trained. Given this circumstance, location of crosstraining as a possible factor in decreasing stress and enhancing quality of work life warrants further investigation. Hospital size, size of the community, continuing education opportunities, organizational structure and leadership, are some additional factors meriting investigation for their possible impact on quality of worklife and stress among nurses.

The study also contributes to understanding of work ability in relation to the occupational health of obstetrical nurses. In order to be high functioning, workplaces need to maximize the employees' actual and potential skills and ameliorate and working conditions. In northern Ontario, positive work settings are important to the recruitment and retention of nurses, and therefore, further study of occupational stress among nurses working in this geographic area.

In this study, total stress scores were not statistically significant in determining a high Quality of Worklife among the nurses at the four hospital locations. Higher reported stress levels have been identified as a factor of nurses likely to plan to leave their nursing positions within twelve (12) months in rural and remote practice settings in Canada. An employee's intention to leave eighty-eight (88) is also related to their job satisfaction. A dissatisfied workforce performing below his or her full potential is a considerable cause for concern, particularly at a time when government, employers and educators are promoting continuous learning as a way of building a cohesive, healthy, and knowledgeable workforce. Nevertheless, the negative implications of cross-training may be mitigated through skillful management, increased social supports in the workplace and through bolstering career and educational opportunities.



Theoretical Framework

This study was anchored to the Systemic Stress: Selye's Theory of General Adaptation Syndrome (GAS). According to Hans Selye (2013), stress results when the body's normal homeostatic mechanisms fail to provide the body with sufficient means to adapt the demands made on it. It proceeds in three stages: (a) The alarm reaction comprises an initial shock phase and a subsequent counter shock phase. The shock phase exhibits autonomic excitability, an increased adrenaline discharge, and gastro-intestinal ulcerations. The counter shock phase marks the initial operation of defensive processes and is characterized by increased adrenocortical activity; (b) If noxious stimulation continues, the organism enters the stage of resistance. In this stage, the symptoms of the alarm reaction disappear, which seemingly indicates the organism's adaptation to the stressor. However, while resistance to the noxious stimulation increases, resistance to other kinds of stressors decreases at the same time; and (c) If the aversive stimulation persists, resistance gives way to the stage of exhaustion. The organism's capability of adapting to the stressor is exhausted, the symptoms of stage (a) reappear, but resistance is no longer possible. Irreversible tissue damages appear, and, if the stimulation persists, the organism dies.

Selye pointed out that stimuli may or may not cause stress, depending upon what he termed sensitization. Certain bodily conditions such as illness, fatigue, anxiety or certain glandular states may make the body more likely than the usual to react stressfully to stimuli.

The theory of Hans Selye supported the study. Stress affects an individual as if stressor continues beyond body's capacity, person exhausts resources and becomes susceptible to an illness. It also affects the individual's activity in which the person cannot perform the tasks effectively and efficiently.

Furthermore, this study also anchored to Betty Neuman's Systems Model in which it provided a comprehensive holistic and system-based approach to nursing that contains an element of flexibility. The theory focused on the response of the patient system to actual or potential environmental stressors and the use of primary, secondary, and tertiary nursing prevention intervention for retention, attainment, and maintenance of patient system wellness. The Neuman systems model was a nursing theory based on the individual's relationship to stress, the reaction to it, and reconstitution factors that were dynamic in nature. According to Neuman's Theory, the central core of the model consists of energy resources (normal temperature range, genetic structure, response pattern, organ strength or weakness, ego structure, and known or commonalities) that are surrounded by several lines of resistance, the normal line of defense, and the flexible line of defense. The lines of resistance represent the internal factors that help the patient defend against a stressor, the normal line of defense represents the person's state of equilibrium, and the flexible line of defense depicts the dynamic nature that can rapidly alter over a short period of time.

The theory of Neuman supported the study in which, stressors like the environment described as environmental forces that interact with and potentially alter system stability. If the person affected by these stressors, the body function is also affected. The person cannot function well and may result to problems with regards to work.

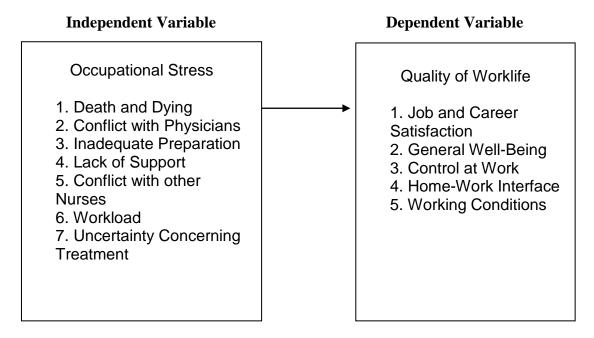
This research is also anchored to the Job Demand-Control-Support (JDCS) of Karasek (1979), which was an expansion of the Job Demand-Control model framework used to define the concepts of stress and quality of worklife in the nursing work environment. The framework has dominated research on occupational stress. According to the model, the highest strain occurs in a



work environment when demands are high, control is low, and social support is low. Social support at work, was later added to the model; as a result, the demand-control support model was defined. This revised model postulates that the highest risk of illness is expected in employers with high demand, low control, and low social support in the workplace. This additional component of the model emphasizes the psychological and social factors people experience in the work environment were underpinned in social and interpersonal relations among participants in the work setting.

In addition, the study also hinged on the Quality of Worklife (QWL) Model espoused by Van Laar, Edwards and Easton (2007). Accordingly, Quality of Worklife (QWL) was defined as the way in which work was good for an individual in the broadest context and in the way an employee would evaluate their job. Its distinguishing elements were a concern about the impact of work on people as well as on organizational effectiveness and the idea of participation in organizational problem solving and decision making. Quality of Worklife (QWL) not only affects job satisfaction but also satisfaction in other life domains. Furthermore, the association between work and non-work life domains and work-related stress were factors that should conceptually included in Quality of Worklife (QWL).

The above theories provided a basis for determining the intention of this research. It is the intention of this study to determine whether the occupational stress would significantly affect the quality of worklife of nurses. This study therefore adopted the four theories as bases in testing the relationship and influence of occupational stress among staff nurses and their quality of worklife.



Conceptual Framework

Figure 1. Research Paradigm



Figure 1 illustrates the conceptualized framework of the study, which contains the independent and dependent variables of the study. The conceptualized paradigm examines the relationship and influence of occupational stress with its sources (death and dying, conflict with physicians, inadequate preparation, lack of support, conflict with other nurses, workload, uncertainty concerning treatment) with quality of worklife with its indicators (job and career satisfaction, general well-being, control at work, home-work interface, working conditions). The arrow pointing from the first box to the second box is the hypothesized relationships that the study sought to test.

Statement of the Problem

The study aimed to determine the level of occupational stress and the quality of worklife among staff nurses in a Level 1 Private Hospital in Padada, Davao del Sur.

Specifically, the study sought to answer the following questions:

1. What is the level of occupational stress experienced by the respondents in the following sources:

1.1 Death and Dying;

1.2 Conflict with Physicians;

1.3 Inadequate Preparation;

1.4 Lack of Support;

1.5 Conflict with other Nurses;

- 1.6 Workload; and
- 1.7 Uncertainty Concerning Treatment?

2. What is the quality of work life of the respondents in terms of:

- 2.1 Job and Career Satisfaction;
- 2.2 General Well-Being;
- 2.3 Control at Work;
- 2.4 Home-Work Interface; and
- 2.5 Working Conditions?
- 3. Is there a significant relationship between occupational stress and quality of work life?

4. Which among the sources of occupational stress significantly affect the quality of worklife?

Hypotheses

The study was guided by the following null hypotheses tested at 0.05 level of significance:

Ho1: There is no significant relationship between occupational stress and quality of worklife.

Ho2: None of the sources of occupational stress significantly affect quality of worklife.

Definition of Terms

The following terms were operationally defined in this study for uniformity and better understanding:

Conflict with Other Nurses. This refers to the source of stress experienced by the respondents such as conflict with nurse supervisor, floating to other units that are short-staffed and difficulty in working with a particular nurse or nurses inside and outside the unit.



Conflict with Physicians. This refers to the source of stress experienced by the respondents such as criticism and conflict with physician, fear of making mistakes in treating a patient, disagreement concerning the treatment of patient and making a decision concerning a patient when the physician is unavailable.

Control at Work. This refers to the quality of worklife by the respondents such as being able to voice opinions and influence changes in any of work, being involved in decisions that affect members of the public in own area of work and being involved in decisions that affect in own area of work.

Death and Dying. This refers to the source of stress experienced by the respondents when taking care of a dying patient and during patient's death.

General Well-Being. This refers to the quality of worklife by the respondents such as life is close to ideal, feel well at the moment, that things work out well, is satisfied with life and feel reasonably happy all things considered.

Home-Work Interface. This refers to the quality of worklife by the respondents such as the employer provides adequate facilities and flexibility to fit work in around family life, the current working hours/patterns suit personal circumstances and having a line manager who actively promotes flexible working hours/patterns.

Inadequate Preparation. This refers to the source of stress experienced by the respondents when they are inadequately prepared to help with the emotional needs of the patient's family and when they are being asked by a patient to which, they do not have a satisfactory answer.

Job and Career Satisfaction. This refers to the quality of worklife by the respondents such as having a clear set of goals and aims to enable one to do the job, encouraged to develop new skills, when done a good job it is acknowledged by line manager, satisfied with the training received in order to perform present job and have the opportunity to use own abilities at work.

Lack of Support. This refers to the source of stress experienced by the respondents such as lack of opportunity to openly talk, share experiences and feelings with other unit personnel about the problems on the unit including patients.

Occupational Stress. This refers to sources of stress which includes death and dying, conflict with physicians, inadequate preparation, lack of support, conflict with other nurses, work load, and uncertainty concerning treatment causing stress for nurses in the workplace and examine stress in psychological, physical and social work environments. This will be measured using the Nursing Stress Scale (NSS).

Quality of Worklife. This refers to the factors such as job and career satisfaction, general well-being, control at work, home-work interface and working conditions. This will be measured using the Work Related Quality of Life Scale (WRQLS).

Uncertainty Concerning Treatment. This refers to the source of stress experienced by the respondents when they received inadequate information from physician regarding the medical condition of a patient, when the physician's order appears to be inappropriate as a treatment to the patient, when the physician is not present during the medical emergency situation, does not know what a patient or a patient's family need to know about the patient's medical condition and its treatment, and the uncertainty regarding the operation and functioning of specialized equipment.



Working Conditions. This refers to the quality of worklife by the respondents such as working in a safe environment, the employer provides with the needs to do the job effectively and that the working conditions are satisfactory.

Workload. This refers to the source of stress experienced by the respondents such as too many tasks required for clerical works, unpredictable staffing and scheduling, breakdown of computer, not enough time to complete all nursing tasks and not enough staff to adequately cover the unit.

Significance of the Study

This research endeavored to benefit the following sectors and stakeholders:

Hospital Management. Through this study, the management of the Hospital will be provided with information and basis in determining the extent of occupational stress and the status of quality of worklife of the nurses. The study can be a further basis of the management to review the possible sources of occupational stress of its nurses and develop intervention programs to address the problems specified.

Nurses. The study would benefit the nurses because it may help in improving the hospital's environment considering that a stress-free environment will result to a better quality of worklife among staff nurses. They will also primarily benefit in the intervention program(s) to be implemented by the hospital's management, if any.

Hospital Nursing Service Administration. The study can be a practical basis for the nursing service administrators to improve the quality of worklife of the nurses by identifying the most influential occupational stressors in the studied hospital.

Future Researchers. For the future researchers, the study would serve as an underpinning scholarly work as well as a basis to glean causal or predictive relationship of factors aside from occupational stress towards quality of worklife. The research can also be an additional reference of the researchers in their current researches.



CHAPTER 2

METHODOLOGY

This chapter presents the research design, participants, instruments, data gathering procedure, ethical considerations, data analysis and scope and limitations that were employed in the study.

Research Design

This study employed the descriptive - correlational research design. In a descriptive research, phenomena being studied were being described and consider one variable at a time, and typically describe what appears to be happening and what the important variables seem to be (Gay and Ary, 1992). Meanwhile, correlational research investigates the nature of the relationship between two or more variables and the theoretical model that might be developed and tested to explain these resultant correlations. In addition, the purpose of correlational research is to determine the relations among two or more variables (Creswell, 2002).

Applying this to the study, it was descriptive because it described the extent of occupational stress and quality of worklife among nurses in a Level 1 Private Hospital in Padada, Davao del Sur and it was correlational because it established the relationship between the two variables under study.

Setting

The study was conducted in a Level 1 Private Hospital located in Padada, Davao del Sur. The hospital started its operation last December 1, 2012. It has an approved bed capacity of 36 beds but can accommodate up to 50 patients in certain occasions. It provided hospital services such as admissions, out-patient consultations, X-rays, ultrasounds, laboratories, operations and maternal delivery. It has specialists in Pediatrics, Internal Medicine, Cardiology, OB-GYNE, Surgery, Orthopedics, Anesthesiology, Dermatology, Dental and Ophthalmology. There are two nursing stations in the hospital namely, Nurse Station 1 (NS1) and Nurse Station 2 (NS2). The Nurse Station 1 covers seven (7) private rooms, one (1) semi – private room, one (1) obstetrical ward and one (1) pediatric ward. The Nurse Station 2 covers one (1) male ward, one (1) female ward, one (1) surgical ward and two (2) isolation rooms.

The hospital has functional Emergency Room, Operating Room, Delivery Room and Neonatal Intensive Monitoring Care Unit. The Emergency Room has minor surgery room, internal examination room and with four beds. The Operating Room caters minor and major operations. The Delivery Room caters normal delivery and obstetrical and gynecological minor operations.

Shown in Figure 1 is the map that marked the location of the hospital in Padada, Davao del Sur.



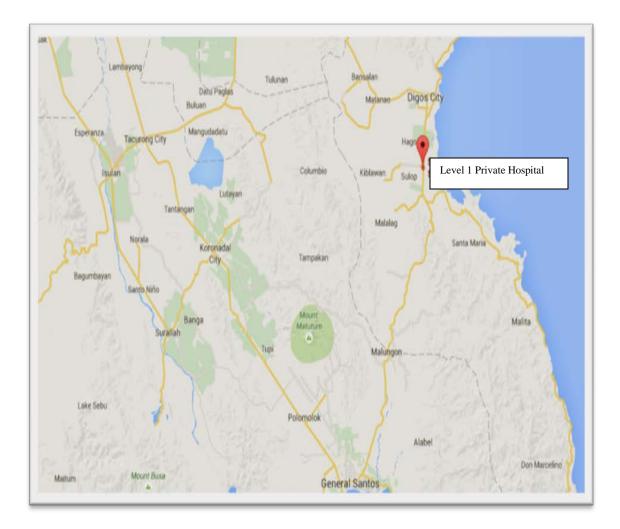


Figure 2. Map Showing the Locale of the Study

Participants

Primary data were gathered through the use of adopted and modified survey questionnaires which were distributed to the thirty-nine (39) staff nurses currently employed in the said Level 1 Private Hospital in Padada, Davao del Sur at the time the study was conducted. Universal sampling via complete enumeration was utilized. However, as part of the ethical considerations of the research, those staff nurses who refused to participate in the survey were excluded.

Measures

Primary data were gathered using the adopted and modified survey-type questionnaires. There were two types of questionnaires.

The first adopted questionnaire was the Nursing Stress Scale (NSS) by Gray-Toft and Anderson (1989). This was the most widely used measurement of stress for nurses. This scale contained thirty four (34) items and designed to describe situations that have been identified as causing stress for nurses in the performance of their duties. Seven major sources of stress closely related to the conceptual categories of stress include: death and dying, conflict with physicians,



inadequate preparation, lack of support, conflict with other nurses, workload, and uncertainty concerning treatment. The scale utilized a four-point Likert scale as follows: 1- Never (This means that the stressor has not been experienced); 2 - Occasionally (This means that the stressor has been experienced occasionally); 3 - Frequently (This means that the stressor has been experienced frequently); and 4 - Very Frequently (This means that the stressor has been experienced very frequently).

As to the overall mean, the following scale was utilized: 1.00 - 1.75 Never (Low); 1.76 - 2.50 Occasionally (Moderate); 2.51 - 3.25 Frequently (High); and 3.26 - 4.00 Very Frequently (Very High).

The second instrument tool was the modified version of the Work Related Quality of Life Scale (WRQLS) by Van Laar (2007). From twenty four (24) items, it was reduced to twenty (20) items which undergone pre-test. The overall result of Cronbach's Alpha was 0.887 and all items were above 0.8, ranging from 0.873 to 0.902. Furthermore, the measure provided greater relevance to healthcare workplace than any previous measure of WRQLS. A psychometric analysis of the QWL found five factors underpinning people's quality of worklife including job and career satisfaction, general well-being, control at work, home-work interface and working conditions. Individual item responses were added together to obtain a total score. The scale utilized a five-point likert scale which as follows: 1 -Strongly Disagree (This means very low quality of worklife); 2 -Disagree (This means low quality of worklife); 3 -Neutral (This means moderate quality of worklife); 4 -Agree (This means high quality of worklife); and 5 -Strongly Agree (This means very high quality of worklife).

As to the overall mean, the following scale was utilized: 1.00 - 1.80 Strongly Disagree (Very Low); 1.81 - 2.60 Disagree (Low); 2.61 - 3.40 Neutral (Moderate); 3.41 - 4.20 Agree (High); and 4.21 - 5.00 Strongly Agree (Very High).

Procedures

In order to have systematic and organized collection of data, the researcher formulated a logical course of action, which was followed to achieve efficient data gathering process.

1. The researcher asked permission in writing from the Medical Director of the Level 1 Private Hospital in order to conduct the research.

2. Permission letters were sent through e-mail to the authors of the questionnaires that were adopted.

3. A letter of request asking permission to conduct survey was given to the nurses who voluntarily agreed to participate in the study at their free time.

4. The second instrument undergone reliability test.

5. Upon the approval of the request, the researcher made arrangements with the hospital in the conduct of the survey.

6. Informed consents were secured from the respondents.

7. A maximum of one week was set by the researcher to fully disseminate and retrieve the questionnaires handed to the nurses.

8. After gathering and collating all the answered questionnaires, responses were collated, analyzed using statistical tools and interpreted.

9. Data were analyzed using Statistical Products and Service Solutions Version 16 (SPSS 16.0). Significant findings from the analysis were summarized with which conclusions and recommendations were drawn.



Ethical Considerations

Ethical consideration was ensured and followed by the researcher through securing permission from the College of Medical Entrepreneurship of Davao Doctors College in the conduct of the study.

Participation in the study was voluntary and was based on the staff nurses ability to give informed consent. Before giving the informed consent, the researcher explained the purpose of the study and was mentioned expressly to the respondents that their responses were treated confidentially and anonymously, and that their participation was voluntary. The respondents were informed that it would be impossible to identify individual answers because no names will be reflected in the questionnaires.

After which, all data and information gathered were kept strictly confidential and will not be accessed by any other party without prior permission from the respondents.

In addition, the researcher asked permission from the authors of the questionnaires that were adopted.

Statistical Tools

This research employed the following statistical tools in order to analyze the data:

Mean. This was used to determine the level of the occupational stress and quality of worklife of the respondents.

Pearson product moment correlation coefficient. This was used to determine the extent and significance of the relationship between occupational stress and quality of worklife.

Linear regression analysis. This was used to determine the degree of influence of occupational stress towards quality of worklife.

Scope and Limitations of the Study

This study aimed to determine the relationship between occupational stress and quality of worklife of nurses in a Level 1 Private Hospital in Padada, Davao del Sur. The influence of occupational stress towards quality of worklife was also investigated.

Moreover, the respondents of the study were the thirty-nine (39) staff nurses currently employed in the hospital.

The study utilized universal sampling via complete enumeration and descriptivecorrelational research design, which sought to determine the relationship between the two variables under study. The study also utilized the two (2) adopted survey-type questionnaires – the Nursing Stress Scale (NSS) and the modified adopted survey-type questionnaire on the Work Related Quality of Life Scale (WRQLS).

The research setting was the Level 1 Private Hospital in Padada, Davao del Sur. The study was conducted from September 01, 2015 to December 31, 2015.



CHAPTER 3

RESULTS AND DISCUSSION

This chapter presents, analyzes, and interprets the data based on the problems identified in the study.

1. What is the level of occupational stress experienced by the respondents in the following sources:

1.1 Death and Dying;
1.2 Conflict with Physicians;
1.3 Inadequate Preparation;
1.4 Lack of Support;
1.5 Conflict with other Nurses;
1.6 Workload; and
1.7 Uncertainty Concerning Treatment?
Table 1. Level of Occupational Stress Experienced by the Respondents

Items	Mean	Description	Level of Stress
Death and Dying	2.46	Occasionally	Moderate
Conflict with Physicians	2.62	Frequently	High
Inadequate Preparation	2.62	Frequently	High
Lack of Support	2.90	Frequently	High
Conflict with other Nurses	2.36	Occasionally	Moderate
Workload	3.35	Very Frequently	Very High
Uncertainty Concerning Treatment	2.66	Frequently	High
Overall Mean	2.75	Frequently	High

Legend: 1.00 -1.75 Never (Low); 1.76 - 2.50 Occasionally (Moderate); 2.51 – 3.25 Frequently (High); 3.26 – 4. 00 Very Frequently (Very High)

Table 1 summarized the responses of nurses of a Level 1 Private Hospital in Padada, Davao del Sur relative to their experienced sources of occupational stress, which include death and dying, conflict with physicians, inadequate preparation, lack of support, conflict with other nurses, workload, and uncertainty concerning treatment.

The overall mean was found to be 2.75, which is described as frequently. This means that the nurses of a Level 1 Private Hospital experienced occupational stress most of the time. This further implies that the nurses experienced a high level of occupational stress. Such finding is similar to the study of Al-Makhaita et al. (2014), that there was indeed a demonstrated high prevalence of work-related stress among the studied respondents (nurses) in both primary and secondary health care levels. In addition, they found out that such high level of work-related stress can be significantly seen if analyzed by demographic factors. They further noted that high level of work-related stress management in health care settings. Moreover, interventional



programs to identify, and relieve sources and effects of stress should be developed including more training, support, and better work conditions.

Furthermore, it can be gleaned in the table that the source of occupational stress with the highest mean score is workload, having an overall mean of 3.35, which is described as "very frequently". This means that the nurses from the Level 1 Private Hospital are collectively experiencing stress when it comes to having strenuous workloads most of the time, if not always. This further implies that the nurses have very high exposure to stress when it comes to unpredictable staffing and scheduling, too many non-nursing tasks required, lack of provision of emotional support to patients, and lack of personnel to adequately cover the area. The results of the study are comparable with the findings of Li (2010), who averred that workload has been demonstrated to be one of the most frequent stressors. In a study of one hundred two (102) nurses in a Chinese intensive care unit, excessive workload was the most frequently cited source of workplace stress. This was a result of the nursing shortage with fewer nurses to care for more patients. Work load, shift work, overtime, and covering for absent colleagues were the most common identified stressors in other studies. It was investigated and perceived occupational stress and related factors among public health nurses, and reported that personal responsibility and workloads were the major sources of occupational stress.

On the other hand, conflict with other nurses was found to have the lowest mean score among the sources of occupational stress having an overall mean of 2.36, which is described as "occasionally". This means that the nurses from the Level 1 Private Hospital are collectively experiencing stress when it comes to experiences of having conflict with other nurses at an occasional rate. This further implies that the nurses have somewhat moderate exposure to stress when it comes to having conflict with other nurses, their supervisor(s), taking in criticisms and dealing with attitude problems of other nurses. The results of the study is comparable with the findings of Almost (2010), whose results suggest that intra-group relationship conflict is stressful, no matter how it is managed. Relationship conflict produces negative emotional reactions in individuals such as anxiety, mistrust, or resentment, frustration, tension, and fear of being rejected by other team members. As a result, relationship conflict is hard to manage, leaving people with increased pressure and less ability to manage them. Nurses who reported high levels of intra-group conflict relationship were more stressed in their job, which included being upset by something happening unexpectedly, feeling nervous and stressed, feeling overwhelmed by difficulties at work and not feeling on top of things at work. Nurses who are highly stressed are more likely to report lower levels of job satisfaction, organizational commitment, and higher intent to leave their job.

2. What is the quality of work life of the respondents in terms of:

- 2.1 Job and Career Satisfaction;
- 2.2 General Well-Being;
- 2.3 Control at Work;
- 2.4 Home-Work Interface; and
- **2.5 Working Conditions?**



Items	Mean	Description
Job and Career Satisfaction	3.02	Moderate
General Wellbeing	2.84	Moderate
Control at Work	3.03	Moderate
Home-Work Interface	2.49	Low
Working Conditions	2.64	Moderate
Overall Mean	2.83	Moderate

Table 2. Quality of Worklife of the Respondents

Legend: 1.00 – 1.80 Strongly Disagree (Very Low); 1.81 – 2.60 Disagree (Low); 2.61 – 3.40 Neutral (Moderate); 3.41 – 4.20 Agree (High); 4.21 – 5.00 Strongly Agree (Very High)

Table 2 summarized the responses of nurses of a Level 1 Private Hospital in Padada, Davao del Sur relative to their quality of worklife, which are assessed in the areas of job and career satisfaction, general wellbeing, control at work, home-work interface and working conditions.

The overall mean was found to be 2.83, which is described as moderate. This means that the overall quality of worklife experienced by the nurses in a Level 1 Private Hospital is in the middle of extremes, which implies that the parameters are on the average: not that high but not too low. This is in conformity with the findings of Nayeri et al. (2011), who found out in a study involving 360 clinical nurses working in the hospitals of Tehran University of Medical Sciences that quality of worklife is at a moderate level among 61.4% of the participants, and that only 3.6% of the nurses reported that they were satisfied with their works. None of those who reported the productivity as low reported their work life quality to be desirable. They have suggested, considering the results, that managers should adopt appropriate policies to promote the quality of worklife and productivity.

Looking at the table, control at work was found to have the highest mean among the indicators of quality of worklife, having an overall mean of 3.03, which is described as "moderate". This means that the nurses from the Level 1 Private Hospital are collectively experiencing a moderate quality of worklife, implying that the nurses feel able to voice opinions and influence changes in any area of work, involved in decisions that affect members of the public in my own area of work and involved in decisions that affect in own area of work. This is similar to the findings of Manzo et al. (2012), who verbalized that a certain degree of nurses' work dynamics partially explains the high percentage for the low freedom reported; that is, tasks are planned throughout the work shift, however, sometimes it is impossible to perform them due to the several interruptions (emergency situations, lack of staff, among others), causing nurses to feel powerless and consider having low control over work. A moderate quality of worklife as manifested in the dimension of control at work means that the nurses feel somewhat comfortable making some decisions during the execution of tasks at the hospital. In this case, answers would be linked to the conception of control over the tasks performance, which can be understood or valued regardless of a broader definition of the work process (power relationships within the institution).

On the other hand, the indicator of quality of worklife with the lowest mean scores is home-work interface, having an overall mean of 2.49, which is interpreted as "low". This means that the nurses from the Level 1 Private Hospital are collectively experiencing low quality of



worklife, implying that the employer of nurses provides adequate facilities and flexibility to fit work in around family life, the current working hours/patterns suit personal circumstances and having a line manager who actively promotes flexible working hours/patterns.

The results of the study are somewhat contradictory to the findings of Vijaimadhavan et al. (2013), whose study revealed that work family interference is positively correlated to family work interference, specific job purpose, motivation, self efficacy, interpersonal communication and efforts by employer. The findings in the study showed that the work/family interference and family/work interference are highly influential.

3. Is there a significant relationship between occupational stress and quality of worklife?

	I	Dependent Varial	ole (y)
Independent Variable (x)	\mathbf{r}_{xy}	Probability	Decision on Ho
Death and Dying	-0.169 ^{ns}	0.305	Accepted
Conflict with Physicians	-0.348**	0.030	Rejected
Inadequate Preparation	-0.311 ^{ns}	0.054	Accepted
Lack of Support	-0.600**	0.000	Rejected
Conflict with other Nurses	-0.268 ^{ns}	0.099	Accepted
Workload	-0.621**	0.000	Rejected
Uncertainty Concerning Treatment	-0.378**	0.018	Rejected

Table 3. Correlation between the Sources of Occupational Stressand Quality of Worklife of the Respondents

** Significant at $p \leq 0.05$

The data in Table 3 showed the correlation of the variables, namely, occupational stress and quality of worklife of nurses working in a Level 1 Private Hospital in Padada, Davao del Sur. It can be gleaned in the results that conflict with physicians was found to be significantly and negatively relate with quality of worklife, having an r-value of -0.348 with a p-value of 0.030 that is less than 0.05. This means that there exists an inverse relationship between conflict



of nurses with physicians and quality of worklife. This entails that the lesser the conflict, the higher the quality of worklife. This is similar with the exhortations of Alhusaini (2010), who reported that in his study of nurses in Saudi Arabia that nurses were found to be dissatisfied with the relationship with their co-workers, especially physicians, where they experienced low levels of respect, appreciation and support. Additionally, they had poor communication and interaction with physicians.

Moreover, lack of support was also found to be negatively yet significantly relate with quality of worklife, having an r-value of -0.600 with a p-value of 0.000 that is less than 0.05. This means that the more stressed the nurses are in terms of getting support from their management, the lesser their quality of worklife will be. This is consistent with the findings of Battu et al. (2014), who mentioned that lack of support is one of the major management-related issues that stress the nurses out. This failing relationship with co-workers then becomes a potential source of dissatisfaction and motivation on nurses, thus affecting their worklife, in addition with lack of participation in decisions made by the nurse manager, lack of recognition for their accomplishments, and lack of respect by the upper management.

In the same manner, workload was also found to significantly yet negatively correlate with quality of worklife, having an r-value of -0.621 with a p-value of 0.000 that is less than 0.05. This entails that the more stressed the nurses are in their workload, the lower their quality of worklife will be. This is coherent with the pronouncements of Chen et al. (2010), who reported in their study that about 81.2% of the nurses believed that they had high workload. They added that shortage in human resources and increase of nurses' workload act as pressure factors among nurses, which lead to professional and organizational desertion.

Finally, it was also found out that uncertainty concerning treatment negatively yet significantly relate with quality of worklife, having an r-value of -0.378 with a p-value of 0.018 that is less than 0.05. This entails that the more stressed the nurses are of being uncertain concerning treatment of patients, the lower their quality of worklife will be. This is analogous with the findings of Mohite (2014), who said that out of all considered causes of stress, uncertainty of concerning treatment factor is responsible for frequent occurrence of stress among majority of nurses. Thus, special measures to address the source of stress to improve their performance are needed, and hence, will positively affect on quality of care given to the patients.

4. Which among the sources of occupational stress significantly affect the quality of worklife?

Independent Variables	В	t-ratio	Probability	Decision on Ho
(Constant)	4.285	10.300	0.000	
Death and Dying	-0.074	-0.434	0.667	Accepted
Conflict with Physicians	-0.126	-0.676	0.504	Accepted
Inadequate Preparation	-0.023	-0.175	0.862	Accepted
Lack of Support	-0.200	-1.559	0.129	Accepted
Conflict with other Nurses	-0.128	-1.409	0.169	Accepted

Table 4. Regression Results Showing the Sources of Occupational Stressthat Affect the Quality of Worklife of the Respondents



Workload	-0.231**	-2.245	0.032	Rejected
Uncertainty Concerning Treatment	-0.136	-0.947	0.351	Accepted
F = 4.191, p = 0.002	$R^2 = 0.486$		** Signifi	cant at <i>p</i> ≤0.05

A further test of causality was required since some of the correlates exhibited significant relationship in the previous test. Hence, Table 4 showed the result of the regression analysis seeking to identify which among the sources of occupational stress affect the quality of worklife of nurses working in a Level 1 private hospital in Padada, Davao del Sur.

Results of the multiple linear regression analysis showed that if among all sources of occupational stress, workload of nurses was found to be the only significant variable that affects quality of worklife of nurses, having a standardized beta coefficient ($\beta = -0.231$) with a p-value of 0.032, which is less than 0.05. This means that every mean increase of workload leads to a 0.231 mean decrease of quality of worklife, holding other variables constant.

Also indicated in the table was the ANOVA results which display the F- and p-values. Note the value of the F statistic and its significance level (in this case, p < 0.05). The value of F was found to be 4.191 with p-value of 0.002, which is statistically significant at a level of 0.05 or less. This suggests a linear relationship among the variables – sources of occupational stress and quality of worklife. This further implies that the resulting regression model is significantly-different from zero. Statistical significance at a 0.05 level means there is a 95 percent chance that the relationship among the variables is not due to chance. The table also showed the value of the R², which is 0.486. This means that 48.6 percent of quality of worklife of nurses is attributed to their workload.

The results above corroborated with one of the theories used in the study, which is the Systems Model of Betty Neuman. This is in relation to the fact that the individual's relationship to stress, the reaction to it, and reconstitution factors that are dynamic in nature, as proven by the significant effect of workload on their quality of worklife. The theory of Neuman also supported the study in which stressors like the environment described as environmental forces that interact with and potentially alter system stability. If the person affected by these stressors, the body function is also affected. The person cannot function well and may result to problems with regards to work.

Likewise, Toh (2011) averred that increased job stress may lower job satisfaction and higher turnover intention. This can be contextualized in the current setting that nurses suffered increased workloads as reported by the day shift nurses. Working day shift was reported to be more physically demanding by nurses as it entailed bathing and lifting of patients. The study also confirmed Nowrouzi's (2013) pronouncements, adding that place may be an important influence on the stress and quality of worklife of obstetrical nurses.



CHAPTER 4

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the summary, conclusions and recommendations of the study based on the problems and objectives set at the beginning of this investigation.

Summary

- 1. In terms of occupational stress, the overall mean was found to be 2.75, which is described as frequently. This means that the nurses of a Level 1 Private Hospital experienced occupational stress most of the time. In addition the source of occupational stress with the highest mean score is workload, having an overall mean of 3.35, which is described as "very frequently", while conflict with other nurses was found to have the lowest mean score among the sources of occupational stress having an overall mean of 2.36, which is described as "occasionally".
- 2. In terms of quality of worklife, the overall mean was found to be 2.83, which is described as moderate. This means that the overall quality of worklife experienced by the nurses in a Level 1 Private Hospital is on the average: not that high but not too low. Among the dimensions of quality of worklife, control at work was found to have the highest mean among the indicators of quality of worklife, having an overall mean of 3.03, which is described as "moderate", while the indicator of quality of worklife with the lowest mean scores is home-work interface, having an overall mean of 2.49, which is interpreted as "low".
- 3. Four sources of occupational stress were found to have significant relationship with overall quality of worklife: conflict with physicians, having an r-value of -0.348 with a p-value of 0.030; lack of support, having an r-value of -0.600 with a p-value of 0.000; workload, having an r-value of -0.621 with a p-value of 0.000; and uncertainty concerning treatment, having an r-value of -0.378 with a p-value of 0.018. All values are lesser than 0.05.
- 4. In the regression analysis, workload of nurses was found to be the only significant variable that affects quality of worklife of nurses, having a standardized beta coefficient ($\beta = -0.231$) with a p-value of 0.032, which is less than 0.05.

Conclusions

Based on the analysis of the data and interpretation of the results, the following conclusions were made:

- 1. The nurses were found to have very high level of occupational stress in workload. Moreover, they also exhibited high occupational stress in terms of lack of support, uncertainty concerning treatment, conflict with physicians and inadequate preparation, and moderately stressed in terms of death and dying and conflict with other nurses.
- 2. The nurses were found to have a moderate quality of worklife in working with the Level 1 Private Hospital in general. They exhibited moderate quality of worklife in the areas of job and career satisfaction, general wellbeing, control at work and working conditions, but low in terms of home-work interface.
- 3. Occupational stress in terms of conflict with physicians, lack of support, workload, and uncertainty concerning treatment have significant yet negative relationship with quality of worklife of nurses. This means that the higher the occupational stress, the lower the quality of worklife of the nurses would be in these dimensions.



4. Workload is the only significant and the best predictor of the quality of worklife of the nurses of the studied Level 1 Private Hospital in Padada, Davao del Sur.

Recommendations

Based on the findings and conclusions of the study, the researcher proposed the following recommendations:

- 1. For the management of the Level 1 Private Hospital, it is recommended that the findings and information herein would be provided to them as basis in determining the extent of occupational stress and the status of quality of worklife of the nurses. They can use the study as a further basis of the management to review the possible sources of occupational stress of its nurses and develop intervention programs to address the problems specified.
- 2. For the nurses, it is recommended that they will be aware of the results of the study in consensus in order to help in improving the hospital's environment, such that the study indicated that a stress-free environment will result to a better quality of worklife among staff nurses. They are also encouraged to participate in any intervention program(s) to be developed and implemented by the hospital's management, if there are any.
- 3. For the nursing service administrators of the Hospital, they are encouraged to adopt and utilize the practical implications of this research as in the improvement of the quality of worklife of the nurses by identifying the most influential occupational stressors. They are encouraged to review the work schedules and workload of each nurses and review the setup of manpower in order to streamline the operations and minimize stress of the nurses.
- 4. For the future researchers, it is recommended that long-term and broader researches will be conducted, with consideration to other variables to be identified.



REFERENCES

Aiken, L.H. et al. (2010). Nurses' Reports On Hospital Care In Five Countries. Health Affairs. Volume 20(3): p. 43-53.

- Alhusaini (2010). Obstacles to the Officiency and Performance of Saudi Nurses at the Ministry of Health, Riyadh Region: Analytical Field Study. Riyadh, Saudi Arabia, Ministry of Health.
- Al-Makhaita et al. (2014). Predictors of Work-Related Stress among Nurses Working in Primary and Secondary Health Care Levels in Dammam, Eastern Saudi Arabia. Journal of Family & Community Medicine, Vol. 21(2), p. 79.
- Almost, J.M. (2010). Conflict within Nursing Work Environments: Concept Analysis. Journal of Advanced Nursing. Vol. 53(4), p. 444-453.
- Battu et al. (2014). Quality of Work Life of Nurses and Paramedical Staff in Hospitals. International Journal of Business and Administration Research Review, Vol. 2(4), p. 200-207.
- Bauer et al. (2010). Occupational stress and Self-Rated Health among Nurses. Latin American Journal of Nursing. Vol. 21(2), p. 475-483.
- Bhuvaneswari, P. (2010). A Study on Quality of Work Life Among Employees in Neyveli Lignite Corporation Limited, Tamilnadu., Research Journal of Commerce & Behavioural Science.
- Chen et al. (2010). Turnover Factors Revisited: A Longitudinal Study of Taiwan- Based Staff Nurses. International Journal of Nursing Studies, Vol. 45(2), p. 277-285.
- Chib, S. (December, 2012). Quality of Work Life and Organisational Performance Parameters at Workplace. SEGi Review, ISSN 1985-5672, Vol. 5, No.2. p. 36-47.
- Chinomona, R. et al. (2010). Soft Power and Desirable Relationship Outcomes in Zimbabwe Distribution Channels. African Journal of Business. Volume. 11(2), p. 20-55.
- De Castro et al. (2010). Occupational Health. Philippine Journal of Nursing. Vol. Vol. 21, p.16.
- De Dreu, C.K.W. et al. (2010). Conflict in the Workplace: Sources, Dynamics, and Functions Across Multiple Levels of Analysis. New York. p. 3-54.
- Frederich et al.(2010). Physician Nurse Conflict. American Journal of Nursing. Vol. 167(10), p. 1310-1315.



- Ganguly, R. et al. (2010). Quality of Worklife and Job satisfaction of a group of University Employees, Asian Journal of Management Research. p. 209-216.
- Hans Selye (2013). Stress and the General Adaptation Syndrome. British Medical Journal. Vol. 1(4667), p. 1383.
- Hosseini, S.M. et al. (2010). Quality of Work Life(QWL) and Its Relationship with Performance, University Of Firouzkouh Branch, Tehran.
- Hui Min Thian, J et al. (2015). Relationships among Stress, Positive Affectivity, and
Engagement among Registered Nurses", Scientific Research
PublishingWork
Inc.Volume 6, p.159.Inc.
- Kamal, S. (2012). The Effect of Nurses' Perceived Job Related Stressors on Job Satisfaction in Taif Governmental Hospitals in of Saudi Arabia. Journal of American Science. Volume 8(3).
- Karasek (1979). The Job Demand-Control (-support) Model and Psychological Well-Being: A Review of 20 years of Empirical Research. Work & stress, Vol. 13(2), p. 87-114.
- Leever et al. (2010). Conflicts and Conflict management in the Collaboration between Nurses and Physicians–A qualitative study. Journal of Interprofessional Care, Vol. 24(6), p. 612-624.
- Li, J et al. (2010). Workplace Stressors, Coping, Demographics and Job Satisfaction in Chinese Intensive Care Nurses. Nursing in Critical Care.Volume13(1). p.12-24.
- MacKusick, C.I. (November/December, 2010). Why Are Nurses Leaving? Findings From an Initial Qualitative Study on Nursing Attrition. MEDSURG Nursing. Vol. 19/No. 6.
- Manzo et al. (2012). Nursing in the Hospital Accreditation Process: Practice and Implications in the Work Quotidian. Latin American Journal of Nursing, Vol. 20(1), p. 151-158.
- Michie, S et al. (2010). Reducing Work Related Psychological ill Health and Sickness Absence: A Systematic Literature Review. Volume 60. Issue 1.
- Mohite, N. et al. (June, 2014). Occupational Stress among Nurses Working at Selected Tertiary Care Hospitals" International Journal of Science and Research (IJSR) Volume 3 Issue 6.
- Moustaka, E. (2010). Sources and Effects of Work-related Stress in Nursing. Health Science Journal, Vol. 4(4).
- Nirmanmoh B. et al (January, 2011). Occupational Stress amongst Nurses from Two Tertiary Care Hospitals in Delhi, India. AMJ;3(11). p. 731-738.



- Nowrouzi, B. (2013). Quality of Worklife: Investigation of Occupational Stressors among Obstetric Nurses in Northeastern Ontario. International Journal of Occupational Medicine and Environmental Health. Vol. 28(3), p. 571-586.
- Patton, C.M. (2014). Conflict in Health Care: A Literature Review. The Internet Journal of Healthcare Administration. Volume 9 Number 1.
- Peters, L. et al. (2013). How Death Anxiety Impacts Nurses' Caring for Patients at the End of Life: A Review of Literature. The Open Nursing Journal. 2013. Volume 7: p.14–21.
- Requena, F. (2010). Social Capital, Satisfaction and Quality of Life in the Workplace. Social Indicators Research. Volume 61(3). p. 331-360.
- Rethinam, G. S. et al. (2010). Work Condition and Predictors of Quality of Work Life of Information System Personnel. Journal of Vocational Behaviour. V. 58. p. 414-435.
- Rubel, M.R.B. (2014). Quality of Work Life and Employee Performance: Antecedent and Outcome of Job Satisfaction in Partial Least Square World Applied Sciences Journal. Volume 31 (4). p. 456-467.
- Shader, K. et al. (2010). Factors Influencing Satisfaction and Anticipated Turnover for Nurses in an Academic Medical Center. Journal of Nursing Administration. Volume 31(4): p. 210-216.
- Toh, S.G. (2011). Systematic Review on the Relationship Between the Nursing Shortage and Job Satisfaction, Stress and Burnout Levels among Nurses in Oncology/Haematology Settings. International Journal of Evidence-based Healthcare.Vol. 10(2), p. 126-141.
- Van Laar et al. (2007). The Work-Related Quality of Life Scale for Healthcare Workers. Journal of Advanced Nursing, Vol. 60(3), p. 325-333.
- Vijaimadan, P. (2013). An Empirical Study on Relationship among Quality of Worklife and its Factors. Procedia-Social and Behavioral Sciences.Vol. 152, p. 108-111.
- WHO (2012). Occupational Stress of Nurses. Paulista Minutes of Nursing. Vol.25(SPE2),p. 151-156.
- Worrall, L. et al. (2010). The Quality of Working Life: Managers Health and Well-Executive Report, Chartered Management Institute.



APPENDICES



APPENDIX 1

Informed Consent to Participate in a Research Study

Research Title: Occupational Stress and Quality of Worklife among Staff Nurses in a Level 1 Private Hospital in Padada, Davao del Sur.

Researcher: Reyzen O. Monserate, RN

Purpose:

You have been selected to participate in a research study The study aims to determine the level of occupational stress and the quality of worklife among staff nurses in your institution.

Procedure:

If you agree to participate, you will be asked to answer all the questions. The survey will only take fifteen (15) minutes to accomplish. The questions in the survey questionnaires are specific in nature and pertain to stressful events related to your professional practice and your quality of worklife. After you complete the survey, please give it back to the researcher.

Risks

The research study procedures involve no foreseeable risks or harm to you. The study involves completing the questionnaires about occupational stress and quality of worklife information. If you decline to participate, you may return the blank survey questionnaires to the researcher.

Benefits and Compensation

You will receive no monetary gift for participation in the study. There is no guarantee or promise that you will receive direct benefits from this study, however, from the items of the questionnaires, you may possibly learn more about occupational stress and quality of worklife.

Confidentiality

Please DO NOT sign your name to any of the forms as all responses will be kept confidential. Questionnaires will be kept by the researcher. Only the researcher will have the access to anonymous individual data. Again, the data will be handled confidentially at all times.



Voluntary Participation

Your participation is completely voluntary. You are under no obligation to participate. Again, subsequent to your consent, you may refuse to participate at any time during the study without penalty.

Informed Consent

By completing and returning these questionnaires, you verify that:

- > You have understand the purpose this study
- > You have voluntarily agreed to participate

Please return your completed questionnaires to the researcher. Thank you for your time in contributing to this research study. Your role is important in representing professional nurses in the field of nursing.



APPENDIX 2

Nursing Stress Scale

Summary: The Nursing Stress Scale (NSS) is the most widely used measure of stress for nurses. The scale was designed to describe situations that have been identified as causing stress for nurses in the performance of their duties. Seven major sources of stress closely related to the conceptual categories of stress include: death and dying, conflict with physicians, inadequate preparation, lack of support, conflict with other nurses, workload, and uncertainty concerning treatment. The questions describe situations that have been identified as causing stress for nurses in the workplace and examine stress in psychological, physical and social work environments. It has been used in studies examining types of stress across pediatric, emergency, psychiatric, and operating room areas.

Scale: 4 pt. Likert scale (1-4) range, from Never (1) to Very Frequently (4)

Scoring: Individual item responses are added together for groups of items and for all 34 items in order to obtain subscale scores and the total scores, respectively.

Reliability: Internal consistency

Internal consistency of the NSS was measured by the Spearman-Brown coefficient (.79), the Guttman split-half coefficient (.79), a coefficient alpha (.89) and a standardized item alpha (.89) [51]. The NSS is the first measurement tool concerned with the frequency of work stressors experienced by nurses. A reliability of .81 is considered satisfactory for this newly developed instrument (Burns & Grove, 1997).

Test-retest reliability

Test-retest reliability was .81 for 31 nurses working in five different units over a 2- week interval. Test-retest reliability exceeded .70 in four of seven subscales; the remainders were Inadequate Preparation (.42), Lack of Staff Support (.65) and Uncertainty Concerning Treatment (.68).

Validity Construct Validity

The construct validity of the NSS is reinforced by factor analysis. Items that had a factor loading greater than 0.30 were removed for analysis. Factor loadings for the items of the NSS varied from .34 to .86 and were evenly spread among seven factors. Each subscale provided multiple variances in the work stressors: Uncertainty Concerning Treatment (5.5%), Workload (5.6%), Conflict With Other Nurses (6.5%), Lack of Staff Support (7.2%), Inadequate Preparation (9.1%), Conflict With Physicians (11.8%) and Death and Dying Patients (39.3%).



NURSING STRESS SCALE

The following items have all been find to be potential sources of stress at work. Stress can be understood as problems you find difficult to cope with, resulting in you feeling worried or anxious. Please work through the questionnaire carefully; circle the number next to each item which best indicates the extent to which each item causes you stress. Be sure to answer every item.

- **1 Never** (This means that the stressor has not been experienced)
- **2 Occasionally** (This means that the stressor has been experienced
 - occasionally)
- **3 Frequently** (This means that the stressor has been experienced frequently)
- 4 Very Frequently (This means that the stressor has been experienced very frequently)

Death and Dying				
1. Performing procedures that patients experience as painful.	1	2	3	4
2. Feeling helpless in the case of a patient who fails to improve.	1	2	3	4
3. Listening or talking to a patient about his/her approaching death.	1	2	3	4
4. The death of a patient.	1	2	3	4
5. The death of a patient with whom you developed a close relationship.	1	2	3	4
6. Physician not being present when a patient dies.	1	2	3	4
7. Watching a patient suffer.	1	2	3	4
Conflict with Physicians		1	I	
8. Criticism by a physician.	1	2	3	4
9. Conflict with a physician.	1	2	3	4
10. Fear of making a mistake in treating a patient.	1	2	3	4
11. Disagreement concerning the treatment of a patient.	1	2	3	4
12. Making a decision concerning a patient when the physician is unavailable.	1	2	3	4
Inadequate Preparation		1		
13. Feeling inadequately prepared to help with the				



emotional needs of a patient's family.	1	2	3	4
14. Being asked a question by a patient for which I			_	
do not have a satisfactory answer.	1	2	3	4
15. Feeling inadequately prepared to help with the				
emotional needs of a patient.	1	2	3	4
Lack of Support			_	
16. Lack of opportunity to talk openly with other				
unit personnel about problems on the unit.	1	2	3	4
17. Lack of an opportunity to share experiences and			_	
feelings with other personnel on the	1	2	3	4
unit.			-	-
18. Lack of an opportunity to express to other				
personnel on the unit my negative feelings towards	1	2	3	4
patients.			-	-
Conflict with other Nurses				
19. Conflict with a nurse supervisor.				
	1	2	3	4
20. Floating to other units that are short-staffed.	_			
	1	2	3	4
21. Difficulty in working with a particular nurse (or			_	
nurses) outside the unit.	1	2	3	4
		_		-
22. Criticism by a nurse supervisor.	1	2	3	4
23. Difficulty in working with a particular nurse (or	1	2	3	4
nurse) on the unit.				
Workload				
24. Breakdown of the computer.				
1	1	2	3	4
25. Unpredictable staffing and scheduling.				
	1	2	3	4
26. Too many non-nursing tasks required, such as				
clerical work.	1	2	3	4
27. Not enough time to provide emotional support				
to a patient.	1	2	3	4
28. Not enough time to complete all of my nursing				
	1	2	3	4
	1	2	3	4
Uncertainty Concerning Treatment				
	1	2	3	4
	1	2	3	4
· · · · · · · · · · · · · · · · · · ·			_	
		1	1	1
 28. Not enough time to complete all of my nursing tasks. 29. Not enough staff to adequately cover the unit. Uncertainty Concerning Treatment 30. Inadequate information from a physician regarding the medical condition of a patient. 31. A physician ordering what appears to be inappropriate treatment for a patient. 	1	2	3	4



emergency.	1	2	3	4
33. Not knowing what a patient or a patient's family ought to be told about the patient's medical condition and its treatment.	1	2	3	4
34. Uncertainty regarding the operation and				
functioning of specialized equipment.	1	2	3	4



Work Related Quality of Life Scale (WRQLS)

Please work through the questionnaire carefully; circle the number next to each item. Be sure to answer every item.

- 1 Strongly Disagree
- 2 Disagree
- 3 Neutral
- 4 Agree

- (This means very low quality of worklife) (This means low quality of worklife)
- (This means moderate quality of worklife)
 - (This means high quality of worklife) (This means very high quality of worklife)
- 5 Strongly Agree

To what extent do you agree with the following?					
Job and Career Satisfaction					
1. I have a clear set of goals and aims to enable one to do my job	1	2	3	4	5
2. I have the opportunity to use my abilities at work	1	2	3	4	5
3. I am encouraged to develop new skills	1	2	3	4	5
4. When I have done a good job it is acknowledged by my line manager	1	2	3	4	5
5. I am satisfied with the training I receive in order to perform my present job	1	2	3	4	5
General Well-Being					
6. I feel well at the moment	1	2	3	4	5
7. In most ways my life is close to ideal	1	2	3	4	5
8. Generally things work out well for me	1	2	3	4	5
9. Recently, I have been feeling unhappy and depressed	1	2	3	4	5
10. I am satisfied with my life	1	2	3	4	5
11. Recently, I have been feeling reasonably happy all things considered	1	2	3	4	5



Control at Work					
12. I feel able to voice opinions and	1	2	3	4	5
influence changes in any area of work					
13. I am involved in decisions that affect					
members of the public in my own area	1	2	3	4	5
of work					
14. I am involved in decisions that affect	1	2	3	4	5
me in my own area of work					
Home-Work Interface					
15. My employer provides adequate					
facilities and flexibility for me to fit	1	2	3	4	5
work in around my family life					
16. My current working hours/patterns	1	2	3	4	5
suit my personal circumstances					
17. My line manager actively promotes	1	2	3	4	5
flexible working hours/patterns					
Working Conditions					
18. I work in a safe environment	1	2	3	4	5
19. My employer provides me with what	1	2	3	4	5
I need to do my job effectively					
20. The working conditions are	1	2	3	4	5
satisfactory					



CURRICULUM VITAE

Personal Data:

Name: Reyzen O. Monserate Address: Purok Bombel, Tiguman, Digos City, Davao del Sur Date of Birth: August 23, 1990 Place of Birth: Digos City Gender: Male Age: 25 years old Citizenship: Filipino Civil Status: Single Religion: Roman Catholic Height: 5'5 Weight: 69 kls. Blood type: Type O Email address: monserate_reyzen@yahoo.com Mother's name: Zenaida O. Monserate Father's Name: Reynaldo O. Monserate (Deceased)



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- Digos City National High School Rizal Avenue, Digos City Year Graduated: 2007 Citizenship Advancement Training Awardee (2007)
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License/Qualification:

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- Association of Nursing Service Administrators of the Philippines (ANSAP) as IV Therapy Nurse License no. 13-011393



PRELIMINARY ASSESMENT OF EFFICIENCY OF TELEMICROSCOPY SYSTEM FOR DISTANCE DIAGNOSIS OF LEISHMANIASIS IN PARAGUAY

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Mucocutaneous leishmaniasis (MCL) is endemic in rural areas of Paraguay, and mainly due to *Leishmania (Viannia) braziliensis*. For diagnosis achievement, clinical and epidemiological data are required in combination with different laboratory methods, which are not available in rural areas. Histopathological analysis (HPA) could give either confirmation of cases if amastigotes of *Leishmania* are found in biopsy samples of patients, or probable diagnosis when histological specific patterns in such samples indicate compatibility with leishmaniasis.

In a country where few experts and little resources are available, the means for many people to access to specialized diagnosis and verifying interpretations remain prohibitive. Telemicroscopy networks enable to overcame these limitations through remote interpretation of images and data, expert teleconsultation and proficiency testing. Telemicroscopy system is implemented through the integration of different sustainable technologies that include mobile networks, web applications, and cell phone camera coupled to a 3D printed microscope.

In this study, we introduce a web-based telemicroscopy platform, in which professionals of different areas share patient data and images for diagnosis of suspected leishmaniasis cases. For this purpose, from 56 cases suspected of mucosal leishmaniasis referred to IICS-UNA, clinical, epidemiological and laboratory data were introduced in the platform.

HPA let to conclusive MCL diagnosis in 14 cases (25%) and made differential diagnosis in 8 cases (14%). In 18 individuals (32%) in which compatible diagnosis was given by HPA, the sharing of clinical and epidemiological data and images, let to arrive to conclusive diagnosis. The remaining 16 cases (29%) had no clear diagnosis. Distance diagnosis let save time and the sharing of data conducted to productive discussions among professionals, arriving them to accurate conclusions for each case.

In conclusion, remote access of images and patient data based in telemicroscopy, let to quick and efficient diagnosis of cases of MCL, and it would be a useful system to be implemented for public health in Paraguay.

Funded by Conacyt Paraguay (Project 14-INV-170)

Keywords: Telemicroscopy, leishmaniasis, diagnosis, Paraguay



Stakeholder perspectives on task-sharing in the administration of Vitamin A supplementation for children 6-59 months with village health workers in Zimbabwe

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Background: Vitamin A supplementation (VAS) for children enhances resistance to disease and reduces all-cause childhood mortality, yet data suggests that coverage in Zimbabwe is as low as 33%. Currently, VAS is only administered by professional health care workers in routine and during campaigns; but task-sharing to village health workers (VHWs) could increase coverage. Thus, a pilot of VAS administration by VHWs was conducted in Manicaland province. Qualitative data was collected to better understand the perspectives of the VHWs and caregivers and inform potential national scale up.

Methodology: Eighteen focus group discussions (FGDs) were conducted separately with VHWs and with caregivers from four districts. VHWs discussed their knowledge on the importance and sources of VAS, knowledge and experience on administration, workload, storage, waste management and their perspectives on the program. Caregivers discussed their perspectives on the task-sharing of VAS administration and their knowledge and attitudes on VAS services.

Results: Caregivers noted that health education given at the health facility did not emphasize VAS therefore their knowledge of VAS was low. They proposed involving the community leaders, in addition to VHWs, as a way to increase awareness and coverage. Both groups indicated that VHWs' administration of VAS made the service more accessible as they were closer and had shorter waiting times than the facilities. VHWs reported increased workload due to VAS documentation requirements, but indicated that there was no negative impact on other services or on quality because VAS services are offered in an integrated way. VWHs are confident in their ability to administer VAS.

Conclusion: VHWs have raised community awareness of VAS and caregivers prefer to receive VAS in the community. Given this feedback from key stakeholders, task-sharing VAS with VHWs with tailored and adequate training should be considered as an approach for increasing VAS coverage in Zimbabwe.



Survival prognosis of non-cancer patients

at the End-of-Stages within 1-year

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The mortality rate from non-cancer is increasing with increasing population aging. Generally, it is difficult to accurately identify the clinical course of non-cancer chronic diseases and to predict their prognoses. If the length of survival in patients with chronic diseases can be predicted, healthcare providers can perform flexible interventions for patients and their families according to clinical stages. Therefore, this study aimed to identify non-cancer patients with a survival prognosis of 1-year by using predictive survival analysis.

We conducted a prosepctive cohort study of 106 patients at home with non-cancer (e.g. cerebrovascular, cardiovascular, musculoskeletal, neurological diseases, dementia) who were receiving home care from Seoul St. Mary's Hospital, had Palliative Performace Scale (PPS) scores of less than 40% in their medical records.

Upon follow-up with the 1-year survival of patients, there were 35 deceased patients (33.0%), and 71 survived patients (67.0%). The average length of survival of them was 306 days. Among them, 76 were females (71.7%), and the mean age was 80.3 years. They had an average of 1.5 comorbidities. The results of analyzing the Cox Proportional Hazard Model showed that the age (Hazard Ratio: 1.041), number of comorbidities (Hazard Ratio: 1.522), time of required nursing (Hazard Ratio: 9.445), waist circumference (Hazard Ratio: 0.954), and PPS (Hazard Ratio: 0.530) were the significant prognostic factors that increased the risk of mortality. The results of the present study can be used as baseline data for predicting the length of survival and prognosis of home-based patients with non-cancer chronic diseases.



The development and evaluation of a culturally adapted intervention to improve psychosocial wellbeing for Chinese dementia caregivers in Hong Kong

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Abstract

In Hong Kong, the prevalence of dementia is increasing. Family caregivers of dementia persons always have psychosocial stress. Appropriate interventions are needed to help them improve psychosocial wellbeing. Cultural adapted interventions are essential and these interventions are to be fit to cultural background of the clients. The benefits of such interventions are to provide better care to the patients and motivate the use of service for the clients. In this paper, we report on the development and evaluation of the culturally adapted intervention for dementia caregivers, aimed at Cantonese-speaking Chinese in Hong Kong. Several sessions are provided and each session lasts for 1-2 hours. 5 types of strategies (peripheral, evidential, sociocultural, linguistic, and constituent-involving) are used for developing the cultural adapted program. The traditional Chinese philosophies (Confucianism, Taoism and Buddhism) are used to help dementia caregivers enhance psychosocial wellbeing. The sessions incorporate various themes in the Chinese philosophies. The themes that include 'follow the rule of nature' and 'the doctrine of the mean', are useful for helping caregivers face stress and illness. Chinese people who are influenced by Chinese culture are prone to accept a psychoeducational program that incorporates Chinese philosophies. Hence, using these strategies may be beneficial for helping dementia caregivers in Cantonese-speaking Chinese communities.

Keywords: dementia, culture, caregiving, psychosocial, intervention

The effect of maternal health care utilization in early initiation of breastfeeding among Nepalese mothers

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ABSTRACT

The World Health Organization (WHO) recommends early initiation of breastfeeding and exclusive breastfeeding for 6 months as best practice to intervene childhood morbidity and mortality. Despite progressive improvement in health indicators, breastfeeding practice in Nepal is still below the expected levels. The purpose of this study is to examine the association between utilization of maternal health service and early initiation of breastfeeding among Nepalese mothers.

Data collected in the 2016 Nepal Demographic Health Survey (NDHS) were used to analyze the association between early initiation of breastfeeding and indicators related to the maternal health service utilization. In the NDHS survey, a total of 1,978 mothers initiated early breastfeeding their newborns. Association between early initiation of breastfeeding and socioeconomic, pregnancy related characteristics, and maternal health services utilization practices were examined by Chi-Square test and multivariable logistic regression analysis.

Mother's occupation (p=0.015), ecological region (p=0.033), province (p=0.000), place of delivery (p=0.000), assistance during delivery (p=0.003) and mode of delivery (p=0.000) showed a significant association with the early initiation of breastfeeding. Mothers who gave birth in health facilities (Adjusted OR 2.46, 95% CI:1.53-3.96) and mothers who had vaginal delivery (Adjusted OR 6.72, 95% CI:4.42-10.22) were more likely to initiate breastfeeding within an hour of birth. Similarly, the odds of initiating early breastfeeding was higher among mothers in Province 6 (Adjusted OR 1.92, 95% CI:1.12-3.30) and Province 7 (Adjusted OR 1.71, 95% CI:1.05-2.78). The likelihood of early initiation of breastfeeding was higher if the deliveries were performed at health facilities and in mothers with vaginal delivery. Deliveries attended by Skilled Birth Attendants (SBA) indicated a significant association with early initiation of breastfeeding.

Almost 6 out of 10 mothers initiated early breastfeeding their newborn in Nepal and mothers who delivered in health institutions were more likely to start breastfeeding within an hour of birth. Hence, breastfeeding promotion strategies should be focused on initiating early breastfeeding practices for mothers by: providing additional benefits to those women who utilize maternal health services; promoting deliveries at health facilities; and providing needed support for mothers with caesarean delivery to initiate breastfeeding early.

Keywords: Breastfeeding initiation, maternal health care utilization, Nepal

INTRODUCTION

Annually undernutrition causes 2.7 million child deaths in the world. One of the reasons for child undernutrition is due to lack of optimal breastfeeding. Early initiation of breastfeeding and exclusive breastfeeding are the most significant ways to prevent infant mortality. Breastfeeding ameliorates child survival, health, and overall development of children (1, 2). It is recommended that early initiation of breastfeeding within an hour of birth and exclusive breastfeeding during the first 6 months of life are regarded as the key interventions for childhood morbidity and mortality (3).

Breastfeeding rates however remain low. Globally 43 percent of the newborns are put to the breast within 1 hour of birth and 40 percent of infants aged 6 months or less are exclusively breastfed (2). The World Health Organization (WHO) defined early initiation of breastfeeding as the proportion of children born in the past 24 months who were put to the breast within an hour of birth (4). The first breast milk after birth contains key nutrients required for an infant which provide energy and immunity to newborn (5). Early breastfeeding is a behavior that also entails the first bond between mother and the baby (6).

Although Nepal has made progress in reducing child and maternal nutrition over the past decades, utilization of maternal health care services in the country is still not to at a satisfactory level (7). Progress was made in terms of maternal health care services. The proportion of women receiving antenatal care services (ANC) from 2011 to 2016 has increased by 25 percent adding 84 percent of women receiving ANC services. As recommended by the Ministry of Health, 59 percent pregnant women received antenatal checkup during all four recommended - 4th, 6th, 8th, and 9th months. Likewise the percentage of institutional deliveries and deliveries attended by Skilled Birth Attendant (SBA) have also increased three fold within 10 years period (8, 9).

The main objective of this study is to access the determinants of maternal health service utilizations for early initiation of breastfeeding in Nepal. Apart from maternal variables, this study further aims to assess the utilization of maternal health care services and early breastfeeding in Nepal. Findings of this paper are expected to provide further evidence to advice interventions aimed to the mothers to utilize maternal health care services and subsequently contribute towards achieving Sustainable Development Goal (SDG) 3 in Nepal.

MATERIALS AND METHODS

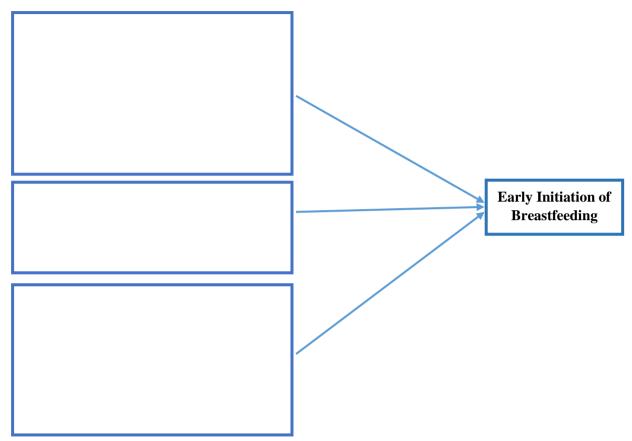
Data for the study were drawn from the 2016 Nepal Demographic and Health Survey (NDHS). NDHS samples were selected in two stages in rural areas and three stages in urban areas. Stratified probability sampling design was employed to select the respondents. Wards were selected as a Primary Sampling Units (PSU) in rural and selecting households from the PSU. In urban setting, one Enumeration Area (EA) was selected from each PSU and then households were selected from the sample EAs.

The survey included 12,862 women between 15 and 49 years of age from 11,040 households (9). The survey collected information of key demographic, health related indicators such as family planning, fertility, mortality rates, maternal and child health status, nutrition. In total, 5,038 mothers provided information on the duration of breastfeeding for their last-born child



at the time of interview. The maximum number of months of breastfeeding recorded in the survey was 59 months.





Dependent variable

The early initiation of breastfeeding was defined by the WHO as the breastfeeding within the first hour of birth (4). In the 2016 NDHS, mothers were asked- "how long after birth did you first put (NAME) to the breast?" And the response were recorded in hours if reported less than 24 hours. For the analysis purpose, the response were categorized as i) "early initiation" if child was put in the breast immediately or within one hour of birth and ii) "delayed breastfeeding" if the child was breastfeed after one hour (10).

Independent variables

Independent variables were categorized under three headings: i) socio economic characteristics of mother, ii) pregnancy related characteristics, and iii) determinants related to the utilization of maternal health services by the pregnant women.

Socio economic characteristics included mother's age, ethnicity, religion, wealth quintile, mother's education, mother's occupation, ecological region, province and place of residence. Similarly, pregnancy related characteristics included mother's age at first birth, birth order and sex of child. Frequency of ANC visit, place of delivery, assistance during delivery and



mode of delivery were the variables included in utilization of maternal health service by the mother.

Socioeconomic variables were categorized as per the need of analysis. The age of the respondent was categorized into five groups: 15-19 years, 20-24 years, 25-29 years, 30-34 years and 35 years and above. Ethnicity of mother was categorized as per the caste classification adopted by further analysis series of the 2006 Nepal Demographic and Health Survey. It then was further grouped into four major categories: relatively advantaged (Brahmin/Chhetri), relatively disadvantaged (Janajati/Newar/Muslims), Disadvantaged (Dalits), and others (Madheshi and other unidentified) (11). Religion was categorized into Hindu and Others (Buddhist, Muslim, Kirat and Christian). Wealth quintile was recategorized into three groups: poor, medium, and rich. Other socioeconomic variables included ecological region, province and the place of residence. Education - highest level of schooling attained by the mother was measured as a categorical variable; not working, paid and agriculture.

Likewise mother's age at first child birth was classified in four categories; less than or equal to 15 years, 16-20 years, 21-25 years and 26 years and above. The parity of mother in the sample was classified into three groups: 1, 2, 3 and more. Frequency of antenatal care visit was categorized into none, 1 to 3 and 4 and more ANC visits. Place of delivery was regrouped into delivery at health facility and other. Assistance during delivery was categorized as assisted by skilled birth attendants and others and the delivery mode was assessed as vaginal delivery and caesarean section.

Data analysis

For this study, descriptive analysis was done to examine the background characteristics related to mother. Associations between the predictors, outcomes, and covariates were first explored which was followed by Pearson's (χ 2) tests to determine whether early initiation of breastfeeding based on other variables were statistically significant. Logistic regression was then performed to estimate the adjusted odds of maternal health service utilization (ANC visit, institutional deliver, delivery attended by SBA, and mode of delivery) and early initiation of breastfeeding. In model 1, variables related to maternal health service utilization were analyzed adjusting all other background variables. Those variables with statistically significant test result were then analyzed in model 2. All analyses used a p-value of less than 0.05 to determine statistical significance using Stata v.15, and weighted to be nationally representative. (12)

Nepal Health Research council approved the ethical approval to conduct the 2016 NHDS. Written consent was taken from the survey participants or thumb print was obtained from illiterate participants involved in the study. Prior permission to use the NDHS dataset was obtained from the DHS program, (http://www.dhsprogram.org) at ICF, USA.



RESULTS

Table 1 shows the overall scenario of early and delayed initiation of breastfeeding in Nepal. A total of 1,978 mothers of children under 5 with last-born children two year preceding the survey were included in the study of which 54.9 percent reported to start breastfeeding within the first hour after delivery. The proportion is less in terms of women with no education who reported to have early initiation of breastfeeding while the percentage is higher in women with secondary (58.5 percent) and primary level (56.8 percent) education. Mothers who worked in agriculture sector had the highest proportion (59.3 percent) of breastfeed practice within an hour of birth. Mother age category 20-24 years reported to have the highest percentage (57.6 percent) of early breastfeeding followed by the age category 15 to 19 and 30 to 34 age group (55.0 percent). Mother in the relatively advantaged (Brahmin/Chhetri) caste group had the highest proportion (60.8 percent) of women initiating early breastfeeding. In respect to the religion disaggregation, the percentages does not vary among Hindu women and other religion. Higher proportion of urban women (57.0 percent) had breastfed their child within one hour of delivery than the rural (52.5 percent). But surprisingly, women in the mountainous region had better profile compared to women in Hill and Terai regions. Similarly, women in Province 7 showed better performance (70.7 percent) in early initiation of breastfeeding with Province 2 having lowest proportion (45.3 percent).

Under pregnancy related characteristics: mother's age at first birth; birth order; and sex of child do not show much variation in percentage with all categories having more than 50 percent.



		Initiation of b	reastfeeding	
Characteristics	Ν	Early n (%)	Delayed n (%)	- P-value
Socio economic characteristics				
Mother's age				0.4674
15–19	291	160 (55.0)	131 (45.0)	
20-24	750	432 (57.6)	318 (42.4)	
25-29	584	301 (51.6)	283 (48.4)	
30-34	248	136 (55.0)	112 (45.0)	
35 years and above	106	57 (53.7)	49 (46.3)	
Ethnicity	100	57 (55.7)	19 (10.0)	0.0084
Relatively advantaged (Brahmin/Chhetri)	535	325 (60.8)	210 (39.2)	0.0001
Relatively disadvantaged (Newar/Janajati/Muslims)	767	423 (55.2)	344 (44.8)	
Dalit	275	155 (56.3)	120 (43.7)	
Others (Madheshi and other unidentified)	401	183 (45.7)	218 (54.3)	
Religion				0.6079
Hindu	1672	923 (55.2)	749 (44.8)	
Others	306	164 (53.4)	143 (46.6)	
Wealth quintile				0.1861
Poor	832	481 (57.8)	351 (42.2)	
Medium	454	232 (51.1)	222 (48.9)	
Rich	692	373 (54.0)	319 (46.1)	
Mother's education				0.0705
No education	570	280 (49.1)	290 (50.9)	
Primary	391	222 (56.8)	169 (43.2)	
Secondary	719	421 (58.5)	298 (41.5)	
Higher	298	164 (55.0)	134 (45.1)	
Mother's Occupation	270	101 (5510)	101 (10.1)	0.0153
Not working	927	471 (50.7)	457 (49.3)	0.0155
Paid	227	128 (56.2)	437 (49.3) 99 (43.8)	
Agriculture	824	488 (59.3)	335 (40.7)	0 1 40 -
Place of residence	10.60			0.1436
Urban	1062	606 (57.0)	456 (43.0)	
Rural	916	481 (52.5)	435 (47.5)	
Eco region				0.0328
Mountain	131	80 (61.3)	51 (38.7)	
Hill	760	444 (58.4)	316 (41.6)	
Terai	1087	563 (51.7)	525 (48.3)	
Province				0.0001
Province 1	338	175 (51.6)	164 (48.4)	
Province 2	513	232 (45.3)	281 (54.7)	
Province 3	312	176 (56.4)	136 (43.6)	
Province 4	164	90 (54.7)	74 (45.3)	
Province 5	364	215 (59.1)	149 (40.9)	

Table 1 Percentage of mothers who started breastfeeding within an hour of birth and who delayed breastfeeding according to the characteristics of mother in Nepal.



Province 6	121	82 (67.6)	39 (32.4)	
Province 7	166	117 (70.7)	49 (29.3)	
Pregnancy related Characterist	ics			
Mother's age at first				0.8379
birth				0.0577
<=15 years	98	54 (55.2)	44 (44.8)	
16-20 years	1169	652 (55.8)	518 (44.3)	
21-25 years	565	305 (54.0)	260 (46.0)	
26 years and above	145	75 (51.9)	70 (48.2)	
Birth order				0.9780
1	806	442 (54.8)	364 (45.2)	
2	573	317 (55.3)	256 (44.7)	
3 or more	600	328 (54.7)	272 (45.3)	
Sex of child				0.1335
Male	1063	565 (53.2)	498 (46.8)	
Female	915	521 (57.0)	394 (43.0)	
Characteristics related to Mater	rnal health service u	tilization		
Times of ANC visit				0.1183
No ANC visit	72	36 (50.2)	36 (49.8)	
1-3 visit	505	253 (50.1)	252 (49.9)	
4 and more visit	1401	797 (56.9)	604 (43.1)	
Place of delivery				0.0001
Health facility	1270	753 (59.3)	517 (40.6)	
Home/others	708	333 (47.0)	375 (53.0)	
Assistance during delivery				0.0027
${ m SBA}^{\pm}$	1277	744 (58.3)	533 (41.7)	
others	701	343 (48.9)	359 (51.1)	
Mode of delivery				0.0000
Vaginal	1780	1042 (58.5)	738 (41.5)	
Caesarean	198	45 (22.5)	153 (77.5)	
+ SBA includes doctor nurse a		· · · ·	~ /	

± SBA includes doctor, nurse, and auxiliary nurse midwife.

Early initiation of breastfeeding was found to be higher in women who had 4 or more ANC visits as compared to no ANC visit or 1-3 ANC visits. Likewise, delivery performed in the health facility (59.3 percent), deliveries attended by SBA (58.3 percent) and mode of delivery as vaginal (58.5 percent) had better result in terms of breastfeeding within first hour of child birth, all showing significant association.

Table 2 shows that place of delivery, delivery mode, ethnicity, occupation of mother and province were significantly associated with early initiation of breastfeeding. While no association was observed in term of times of ANC visit, delivery assisted by SBA, ethnicity, occupation, and ecological zone. Out of four variables selected for maternal health service utilization, two variables showed significant association; place of delivery and mode of delivery. The odds of mothers initiating breastfeeding within the first hour of birth was positively associated (OR 2.5, 95% CI: 1.53 - 3.96) to those mother who delivered their newborn at the health facilities compared to those mothers who had deliveries at home. Vaginal delivery had a positive effect on early initiation of breastfeeding showing that



mothers having vaginal delivery (OR 6.72, 95% CI:4.42 - 10.22) were more likely to initiate early breastfeeding than mothers with caesarean delivery. However, no significant association between number of ANC visits and early initiation of breastfeeding was found. Mothers in Province 6 (OR 1.92, 95% CI:1.12 - 3.30) and Province 7 (OR 1.71, 95% CI:1.05 - 2.78) were more likely to start early breastfeeding as compared to the mother the Province 1.

<u>Observed</u>	Μ	odel 1	Μ	odel 2
Characteristics	Odds ratio	95% CI	Odds ratio	95% CI
ANC visits				
No ANC visits	1		1	
2-3	.0.84	(0.47 - 1.5)	0.94	(0.52 - 1.69)
4+	1.00	(0.55 - 1.77)	1.03	(0.57 - 1.87)
Place of delivery				
Home/others	1		1	
Health facility	2.46***	(1.53 - 3.96)	2.22***	(1.37 - 3.60)
Delivery assisted by SBA				
Others	1		1	
${ m SBA}^{\pm}$	0.84	(0.51 - 1.38)	0.95	(0.57 - 1.58)
Mode of delivery	1			
Caesarean				
Vaginal	6.72***	(4.42 - 10.22)	6.709***	(4.30 - 10.42)
Ethnicity			1	
Relatively disadvantaged			1.07	(0.78 - 1.46)
(Newar/Janajati/Muslims) Dalit			1.11	(0.76 - 1.63)
Others (Madheshi and other				(0.70 - 1.03)
unidentified)			0.92	(0.58 - 1.44)
Occupation of women			1	
Not working				
Paid			1.19	(0.80 - 1.78)
Agriculture			1.12	(0.87 - 1.43)
Ecological zone				× ,
Mountain			1	
Hill			0.92	(0.56 - 1.50)
Terai			1.00	(0.60 - 1.65)
Province				. ,
Province 1			1	
Province 2			0.74	(0.45 - 1.23)
Province 3			1.21	(0.74 - 1.97)
Province 4			1.12	(0.67 - 1.87)
Province 5			1.18	(0.76 - 1.85)
Province 6			1.92**	(1.12 - 3.30)
Province 7			1.71**	(1.05 - 2.78)

 Table 2 Association between mother's utilization of maternal health service and initiation of breastfeeding within an hour after birth

*** p<0.01, ** p<0.05, * p<0.1

 \pm SBA includes doctor, nurse, and auxiliary nurse midwife.

DISCUSSION

The purpose of this study was to explore whether utilization of maternal health care services has any influence in early initiation of breastfeeding among recently delivered mothers.

Multivariate logistic regression analysis showed that the birth at the health institution was positively associated in early initiation of breastfeeding than those who gave birth at home. This finding is similar to the study conducted in Ghana and northwest Ethiopia (13, 14). Mother of babies delivered in the health facilities can benefit from direct counseling and encouragement from health workers which promote positive environment for early initiation of breastfeeding. Several studies done in various countries suggested that hospital-based breastfeeding promotional strategies have demonstrated success in improving breastfeeding practices in the hospital setting (15-18).

Assistance during delivery by the skilled health providers is crucial indicator for maternal and child survival. This study suggested that assistance during delivery was significantly associated to the early initiation of breastfeeding. NDHS 2016 reported that 57 percent of the births were delivered in health facilities and assisted by skilled birth attendants, this figure increased nearly by 22 percent compared to the NDHS in 2011 (9). Government of Nepal has been providing various initiatives such as providing free delivery care and transportation incentive schemes to women delivering in health facilities under the safe motherhood program. To increase the institutional delivery, subsidies are also provided to health facilities for free delivery care (19).

This study showed that early initiation of breastfeeding was significantly associated among mothers with vaginal delivery. That is women who undergo cesarean delivery are less likely to initiate breastfeeding as compared with the women with vaginal birth. The findings was in agreement with the studies conducted in Mexico, Uganda and Puerto Rico (20-22).

After caesarean delivery, exhaustion and post caesarean pain contribute to the delayed breastfeeding (23). Study suggests that caesarean deliveries are associated with delayed breastfeeding and further breastfeeding support are needed along with focused counseling and encouragement to the mothers in order to provide the appropriate anticipatory guidance to reduce difficulties (24).

CONCLUSION AND RECOMMENDATION

More than half of the mothers initiated early breastfeeding within 1 hour of birth in Nepal. Mother's attainment of the maternal health care services were found to have been positively associated with early breastfeeding. Mother's background characteristics such as ethnicity, mother's occupation, ecological region, and province are significantly associated with the early initiation of breastfeeding. Under maternal health care utilization, association was noted in case of place of delivery and assistance during delivery with initiation of breastfeeding with an hour. Vaginal delivery is associated with higher odds of initiation of breastfeeding among mother.

As indicated by the findings of this study, babies born at the health facilities are more likely to be breastfed as mothers have more chances of receiving counseling and hands-on support on breastfeeding techniques by trained health workers. It is important to educate health workers to assist mothers in early breastfeeding initiation. Mothers and health workers should



be aware of the negative association of cesarean delivery and early initiation of breastfeeding. Specific support for mothers who deliver by caesarean section is needed for early initiation of breastfeeding. Effective implementation of maternal health care services that are known to improve breastfeeding practices should be strengthen.

REFERENCE

1. Victora CG, Bahl R, Barros AJ, França GV, Horton S, Krasevec J, et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. The Lancet. 2016;387(10017):475-90.

2. WHO. Factsheet: Infant and young child feeding Geneva: World Health Oranization; 2018 [cited 2018 15 May]. Available from: <u>http://www.who.int/en/news-room/fact-sheets/detail/infant-and-young-child-feeding</u>.

3. WHO. Infant and young child feeding: model chapter for textbooks for medical students and allied health professionals. 2009.

4. Organization WH. Indicators for assessing infant and young child feeding practices: conclusions of a consensus meeting held 6-8 November 2007 in Washington DC, USA: World Health Organization (WHO); 2008.

5. Hanson LÅ, Korotkova M, editors. The role of breastfeeding in prevention of neonatal infection. Seminars in neonatology; 2002: Elsevier.

6. Rollins NC, Bhandari N, Hajeebhoy N, Horton S, Lutter CK, Martines JC, et al. Why invest, and what it will take to improve breastfeeding practices? The Lancet. 2016;387(10017):491-504.

7. NPC. Sustainable Development Goals, 2016-2030, National (Preliminary) Report. Kathmandu, Nepal: National Planning Commission; 2015 2015.

8. Ministry of Health, New ERA, ICF. Nepal Demographic and Health Survey 2011. Kathmandu, Nepal: Ministry of Health and Population (MoHP) [Nepal], New ERA and ICF International Inc.; 2012.

9. Ministry of Health, New ERA, ICF. Nepal Demographic and Health Survey 2016. Kathmandu, Nepal: Ministry of Health, Nepal; 2017.

10. Daelmans B, Dewey K, Arimond M. New and updated indicators for assessing infant and young child feeding. Food and nutrition bulletin. 2009;30(2_suppl2):S256-S62.

11. Bennett L, Dahal DR, Govindasamy P. Caste ethnic and regional identity in Nepal: Further analysis of the 2006 Nepal Demographic and Health Survey. 2008.

12. StataCorp. Stata Statistical Software: Release 15. College Station, TX: StataCorp LLC2017.

13. Aidam BA, Perez-Escamilla R, Lartey A, Aidam J. Factors associated with exclusive breastfeeding in Accra, Ghana. European journal of clinical nutrition. 2005;59(6):789.

14. Biks GA, Tariku A, Tessema GA. Effects of antenatal care and institutional delivery on exclusive breastfeeding practice in northwest Ethiopia: a nested case–control study. International breastfeeding journal. 2015;10(1):30.

15. Hawkins SS, Stern AD, Baum CF, Gillman MW. Evaluating the impact of the Baby-Friendly Hospital Initiative on breast-feeding rates: a multi-state analysis. Public Health Nutr. 2015;18(2):189-97.

16. Mosher C, Sarkar A, Hashem AA, Hamadah RE, Alhoulan A, AlMakadma YA, et al. Self-reported breast feeding practices and the Baby Friendly Hospital Initiative in Riyadh, Saudi Arabia: prospective cohort study. BMJ Open. 2016;6(12):e012890.



17. Ojofeitimi E, Esimai O, Owolabi O, Oluwabusi, Olaobaju O, Olanuga T. Breast feeding practices in urban and rural health centres: impact of baby friendly hospital initiative in Ile-Ife, Nigeria. Nutrition and health. 2000;14(2):119-25.

18. Philipp BL, Merewood A, Miller LW, Chawla N, Murphy-Smith MM, Gomes JS, et al. Baby-friendly hospital initiative improves breastfeeding initiation rates in a US hospital setting. Pediatrics. 2001;108(3):677-81.

19. Health Mo, Population. National Safe Motherhood and Newborn Health Long-Term Plan, 2006–2017. MOHP Kathmandu; 2006.

20. Mukunya D, Tumwine JK, Nankabirwa V, Ndeezi G, Odongo I, Tumuhamye J, et al. Factors associated with delayed initiation of breastfeeding: a survey in Northern Uganda. Glob Health Action. 2017;10(1):1410975.

21. Pérez-Escamilla R, Maulén-Radovan I, Dewey KG. The association between cesarean delivery and breast-feeding outcomes among Mexican women. American Journal of Public Health. 1996;86(6):832-6.

22. Sharifi F, Nouraei S, Sharifi N. Factors affecting the choice of type of delivery with breast feeding in Iranian mothers. Electron Physician. 2017;9(9):5265-9.

23. Kalisa R, Malande O, Nankunda J, Tumwine JK. Magnitude and factors associated with delayed initiation of breastfeeding among mothers who deliver in Mulago hospital, Uganda. Afr Health Sci. 2015;15(4):1130-5.

24. Hobbs AJ, Mannion CA, McDonald SW, Brockway M, Tough SC. The impact of caesarean section on breastfeeding initiation, duration and difficulties in the first four months postpartum. BMC Pregnancy Childbirth. 2016;16:90.



The Effects of Depressive Symptom Management Interventions on Low-

Income Mothers: A Systematic Review and Meta-Analysis

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ABSTRACT

Aim: To evaluate the effects of depressive symptom management interventions (DSMIs) on low-income mothers

Background: Depressive symptoms and depression are common complications following childbirth. Depressive symptoms in low-income mothers have a negative impact on infant-toddler development.

Design: A systematic review and meta-analysis was conducted to provide a synthesis and critical appraisal of the included studies.

Data Sources: Searching the electronic databases PubMed, EMBASE, CINAHL, PsycInfo, and Cochrane Library CENTRAL, we conducted a systematic search of randomized controlled trials through November 2017.

Review Methods: Ten studies were found for systematic review of DSMI content, mode of delivery, session, and provider. We then conducted a meta-analysis of nine randomized



controlled trials involving 798 participants, comparing low-income mothers with and without DSMIs.

Results: A significant effect was noted in improving depressive symptoms in low-income mothers with toddlers, and for interventions lasting 8 weeks or less.

Conclusion: The meta-analysis suggested that DSMIs for low-income mothers can be effective, but that improvement varies by intervention type, intervention duration, and whether the mothers had other children. The findings of this study will contribute to the development of effective programs by providing scientific evidence for the development of depressive symptom intervention programs for low-income mothers, especially in terms of target population and intervention duration.

KEYWORDS

low-income mothers, depressive symptoms, meta-analysis, systematic review, nursing, child growth, depressive symptom management intervention



The lived experience of Chinese caregivers of community-dwelling older persons with dementia: A qualitative study in Hong Kong

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Abstract

In Hong Kong, the prevalence of dementia is increasing. Family caregivers of dementia persons are always at high risk of psychological stress. Since most of the studies on the lived experience of dementia caregivers focused on Western population, more studies should be performed in Asia, especially in Hong Kong. In this paper, nine Chinese caregivers of community-dwelling older persons with dementia were interviewed. Data were analyzed using interpretative phenomenological analysis. Three themes were developed: 'meaning of caregiving', 'acceptance of fate', 'crisis creates opportunities'. Each theme contains different sub-themes. The sub-themes of meaning of caregiving were found: 'looks like taking care a child' and 'fulfillment of obligation of the family role'. The theme of 'acceptance of fate' obtains 'positive to face illness' and 'active coping strategies'. The sub-themes of 'crisis creates opportunities on self-improvement'. The findings showed that their caregiving perception and progress were still under the influence of Chinese traditional cultural values. Clinical implications of this study, such as developing appropriate services for dementia caregivers, were also discussed.

Keywords: dementia, culture, caregiving



The Relationship between Self Perception of Aging and Healthy Lifestyle

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Abstract—The current research was to evaluate the relationship between self perception of aging and healthy lifestyle in older adults. This study hypothesized that self perception of aging correlated positively with healthy lifestyle. In order to examine that hypothesis, 120 older adults were sampled using accidental sampling method. Self perception of aging was measured using Attitude Toward Own Aging (ATOA) [1] and healthy lifestyle was measured using Health Enhancement Lifestyle Profile-Screener (HELP-Screener) [2]. The result showed that the Pearson Correlation indicates self perception of aging has a positive significant correlation (P<0.05) with healthy lifestyle.

Keywords—healthy lifestyle; older adults; self pereption of aging

I. INTRODUCTION

Based on data published by Ministry of Health Republic of Indonesia, nowadays, half of older adults population in the world lived in Asia. In Indonesia, that older adults are predicted to be more populating than people under 15 years old in 2040. As they are going to populate Indonesia, we should take them into account, particularly in health. By concerning more on this growing population's health, national health expectancy will be arisen which in turn could increase health national index and national development index.

Regarding some changes that occured, older adults with high awareness have done some beneficial activities toward health, such as joining senior club [4]. On the other hand, there were certain seniors whose life was still unhealthy [5]. Individual lifestyle was affected by various reasons, such as cultural aspects including tradition, value, fatalism, and etnocentrism [6]. In addition, according to Clipp an Steinhauser [7] there were three demographic factors that could determine personal health: location of living place, accessibility to health facilities, diversity in society (such as social economic status, gender, and personal experience towards health facilities) and condition in living place. Besides, self perception of aging could also help us understand older adults' health.

Self perception of aging is defined as subjective perception or older adults' individual attitude towards aging that occured to them [8]. A number of research found that the impact of self perception of aging to health was greater than the effect of health to self perception of aging [9]. Longitudinal research done by Sargent-Cox, Anstey, and Luszcz revealed that self perception of aging was a predictor of death. Furthermore, Levy and Myers [10] found that elderly people who owned positive self perception of aging practiced preventive health behavior over the next 20 years.



Meanwhile, Jussim et. al. [11] explained that self perception of aging allowed changes in one's health which in turn drove self-fulfilling prophecy to be changed. It could be occured as specific hopes in one towards health were able to emit cognitive process and behavior which were planned to make them came true.

As human being grow, some parts in body will be changed. For instance, there will be wrinkles in some spots on face and the backbone are started to bended. In some points, the changes could be the reason of the different body image in older adults (compared to when they were younger). In addition, judgements from surrounding people may also influence them. However, those changes could still be prevented and cured by particular activities, such as aerobic and regular medical check-up. Regarding to a study conducted by Nurussofa [12] senior with those activities tended to be healthier and had more positive body image. Besides, health condition was found as a determinant of individual's hopes towards aging. For example, older adults with deppression felt unhappy and pesimistic to face the future as well as they diminished the hopes to reach and keep the fitness in late life.

Based on several reasons above, factors that could affect healthy lifestyle emerged not only from external but also from individual itself, such as self perception of aging. This study aimed to find out the relationship between healthy lifestyle and self perception of aging. Self perception of aging was selected as it might be changed even when one was aged.

II. TEST DESCRIPTION

The current research used definition of self perception of aging from Lawton [8] while healthy lifestyle was included prevention and promotion of health enacted one to possess a healthier life and improved quality of life. This study was a quantitative research which used one subscale of *Philadelphia Geriatric Center Morale Scale*, *Attitude Toward Own Aging (ATOA)* to measure self perception of aging. Meanwhile, healthy lifestyle was measured using *Health Enhancement Lifestyle Profile-Screener (HELP-Screener)*.

ATOA, which has been used in several countries, comprised 5 items ("Do things keep getting worse as you get older?", "Do you have as much pep as you had last year?", "Do you feel that as you get older you are less useful?", "As you get older, are things _____ than you thought?", and "Are you happy now as you were when you were younger?"). There were two types of response for each item: "yes" and "no". The item would be scored 1 if they gave positive response. In contrast, score 0 would be given for any negative response. On the other hand, *HELP-Screener* consisted 15 items (comprised 7 aspects: Exercise, Diet, Work, Education, and Social Participation, Leisure, Activities of Daily Living, Psychological Wellness and Spiritual Participation, and Other Health Promotion and Risk Behaviors) with two responses were given on each item: "yes" and "no". Considering each item on this scale was favorable, so that each "yes" answer would be scored 1 and "no" answer would be scored 0.

After the outliers were excluded, every score in each scale was summed up and analyzed using *Statistic Package for Social Science (SPSS) for Windows*. Analysis techniques used to process data were *frequency distribution* (to see the frequency per demographic categories as well as the "yes" and "no" responses for each healthy



lifestyle aspect), descriptive statistic (to measure minimum and maximum score, and mean), and *standard deviation*, *Pearson Correlation*, and *Crosstabs*.

III. TECHNICAL DETAILS

There were 120 participants involved in this study. Regarding certain conditions with older adults such as the lack of listening ability, the questionnaire were mostly read by researcher and explained in more simple words. During the process of data collecting, it was important to deliver some examples in order to yield the better understanding of participants.

IV. RESULTS

Result based on *Pearson Correlation* showed that self perception of aging and healthy lifestyle were correlated positively and significantly (r = +0,214; n=120; p<0,01; *one-tailed*). Hence, the higher the score of self perception of aging, the higher score of healthy lifestyle.

In addition, *standard deviation* obtained from *ATOA* was not overly great meaning that self perception of aging of participant was homogenous. The similar result was also found in healthy lifestyle. The comparison between each demographic characteristic of participants was actually not really matters with healthy lifestyle, except the fact that people aged 76 to more than 90 years old were scored lower than the younger ones.

V. DISCUSSIONS

The results yielded in this study were congruent with previous studies. For instance, older adults who regularly did exercises would have the high score of self perception of aging. as stated by Chalabaev, Emile, Corrion, Stephan, Clément-Guilotin, Pradier, and d'Arripe-Longueville [13]. Other motivation mentioned by Levy [14] countered the perception, old meant weak and susceptible to disesases. According to Kleinspehn-Ammerlahn, Kotter-Grühn, and Smith [15], most elderly people were also felt younger than their age so that they were still felt glad, had a spirit, and did anything even when they age was no longer young.

As participants were dominated by women, in some ways it could also give us the better understanding the score of healthy lifestyle. Pliner, Chaiken, and Flett [16] mentioned that the apperance for old women was important. Hallinan and Schüler [17] added that a major motive for elderly women to engage in physical activity might be to maintain or achieve a certain body-shape ideal perceived by the subjects to be endorsed by society.

Environment had a big part in helping participant to have the good self perception of aging. The most of participants who lived in nursing home felt more pleasant. They showed the high score of self perception of aging. Almost all participants told that ever since they aged close to 60 years old or had a chronical disease, they already had the high awareness of health.



Statistical analysis showed that item number 1 ("I spend sufficient time taking good care of myself" was invalid (e.g. grooming, showering, cooking, house cleaning). It can be understood by two reasons. Firstly, perhaps the participants had no sufficient time for taking good care of themselves. Secondly, there was the probability of inconsistency between the items in aspect of "Activities of Daily Living" occured. It might be because of what was measured in each aspect not so related. On the other hand, the low reliability of self perception of aging probably happened by instability and changes in self perception of aging that occured during certain period of time. Hence, for the study in the future, it is suggested to add the instruction in questionnaire related to time easing participants in describing both their self perception of aging and healthy lifestyle. The enhanced skill of gaining more accurate data and information is really needed to assist participants in filling the questionnaire. It will be very useful to improve effectiveness and efficiency making the discussion with respondence more comprehensive.

VI. CONCLUSIONS

Self perception of aging was found positively correlated with healthy lifestyle.

For further studies, additional instruction related to time and the enhancement of researcher's ability are needed to improve the validity and reliability of each scale.

REFERENCES

- C. Mosser, J. Spagnoli, and B. Santos-Eggimann, "Self Perception of Aging and Vulnerability to Adverse Outcomes at The Age of 65-70 years," in J Gerontol B Pschol Sci Soc Sci, 2011, 66B (6), pp. 675-680, 2011.
- [2] J. E. Hwang, "Promoting Healthy Lifestyles with Aging: Development and Validation of The Health Enhancement Lifestyle profile (HELP) Using The Rasch Measurement Model," in American Journal of Occupational Therapy, vol. 64, pp. 784-796, 2010.
- [3] Ministry of Health of The Republic of Indonesia, "Buletin Jendela Data dan Informasi Kesehatan,", 2013.
- [4] N. Untarini, "Pemberdayaan Lansia Surabaya Melalui Aktivitas Kognitif dan Aktivitas Sosial Sebagai Upaya Mengatasi Kondisi Fisik dan Psikologis." In Lentera, Jurnal Studi Perempuan, vol. 9, no. 1, June, 2013.
- [5] S. Hartini and Mulyanti, "Efektivitas Senam Lamsia terhadap Penurunan Kadar Kolesterol Darah pada Lansia Merokok di Dusun Pirak Mertosutan Sidoluhur Godean Sleman Yogyakarta Tahun 2009," in Jurnal KESMADASKA, vol. 3, no.1, pp. 784-796, 2009.
- [6] G. M. Foster, "Traditional Cultures and The Impact of Techonological Change," New York: Harper & Row Publishers, 1962.
- [7] E. C. Clipp and K. E. Steinhauser, "Psychosocial Influences on Health in Later Life," in Geriatric Medicine: an Evidence-based Approach (4th edition), 2003.
- [8] G. Kim, Y. Jang, and D. A. Chiriboga, "Personal Views About Aginng Among Korean American Older Adults: The Role of Physical Health, Social Network, and Acculturation," in Journal of Cross Gerontology, 27(2), pp. 139-148, 2012.
- [9] K. A Sargent-Cox, K. J. Anstey, and M. A. Luszcz, "The Relationship between



Change in Self-Perceptions of Aging and Physical Functioning in Older Adults," in Psychology and Aging, vol. 27 (3), pp. 750-760, 2012.

- [10] B. R. Levy and L. M. Myers, "Preventive Health Behavior Influenced by Selfperceptions of Aging," in Preventive Medicine, 39 (2004), pp. 625-629, 2004.
- [11] S. Wurm, L. M. Warner, J. P. Ziegelmann, J. K. Wolff, and B. Schüz, "How Do negative Self-Perceptions of Aging Become a Self-Fulfilling Prophecy," in Psychology and Aging 2013, vol. 1, no. 2, pp. 1088-1097, 2013.
- [12] D. Adiningtyas, "Perbedaan Persepsi Proses Penuaan dan Konsep Diri Lansia yang Mengikuti Posbindu dan Tidak Mengikuti Posbindu di Dukuh Kauman Jekulo Kudus," Semarang: Program Studi Ilmu Keperawatan Unimus, 2011.
- [13] A. Chalabaev, M. Emile, K. Corrion, Y. Stephan, C. Clément-Guilotin, C. Pradier, and F. d'Arripe-Longueville, "Development and Validation of The Aging Stereotypes and Exercise Scale," in J Aging Phys 2013, pp. 319-334, 2013.
- [14] B. Levy, "Stereotype Embodiment: A Psychosocial Approach to Aging," in Current Directions in Psychological Science, 18, pp. 332-336, 2009.
- [15] A. Kleinspehn-Ammerlahn, D. Kotter-Grühn, and J. Smith, "Self Perceptions of Aging: Do Subjective Age and Satisfaction With Aging Change During Old Age?," in Journal of Gerontology: PSYCHOLOGICAL SCIENCES 2008, vol. 63B, no. 6, pp. 377-385, 2008.
- [16] L. H. Clarke, "Older Women's Bodies and the Self: The Construction of Identity in Later Life," in Canadian Review of Sociology and Anthropology, vol. 38, pp. 441-464, 2001.
- [17] C. J. Hallinan and P. B. Schuler, "Body-Shape Perceptions of Elderly Women Exercises and Nonexercisers," in Perceptual and Motor Skills, 77, pp. 451-456, 1993.



Transitions in the Health Care Systems in Times of Uncertainty – Exploring views by Experts through Mindfulness & Emotional Intelligence in Bangkok, Thailand

Original Article

By Ms. Bhavna Khemlani

Abstract

This research focuses on the Transitions in the Health Care Systems in Times of Uncertainty – Exploring views by Experts through Mindfulness & Emotional Intelligence in Bangkok, Thailand. Gratitude to all the experts who were part of this research, making the study interesting, and sharing real life experiences and views. The awareness of Emotional Intelligence and changes in the Health industry in Thailand shared by Dr. Davin Narula, Mrs. Rasee Govindani, Ms. Anette Pollner, and Dr. Anand Sachamuneewongse has given a valuable insight about quality health services, well-being, experience, and expressing possible changes and integration of services in the health industry.

Aim: The objectives of this research were whether the regular practice of Guided Mindful Meditation/training could improve patients' emotional intelligence. To distinguish the effect of pressure from the internal and external environment of health system in Bangkok. To evaluate the differences of between practitioners, experts, and doctors on various practices and handling transitions in the Health Care systems in Times of Uncertainty. To bring awareness on valuable techniques and resources for practitioners, doctors, and patients to creating Balance & practicing Mindfulness in their daily life. To analyze the shared experience of Mindfulness performed by the four experts in this research. Methods: All four experts fulfilled the questions and answered all questionnaires of Philadelphia Mindfulness Scale (PHLMS), Emotional Intelligence (DERS) questionnaire, & the Global Health PROMIS 10. Dr. Davin, Mrs. Rasee, Ms. Anette, and Dr. Anand were aware of their emotional intelligence in terms of thoughts, environment, mood, and there are situations that may bring some difficulties to deal with the internal state, however, they tend to find a suitable approach to deal with it. Dr. Anand did not usually focus on emotional intelligence and mindfulness approaches and this research guided him to reflect on several aspects that relate to him and his work in a deeper perspective. Face to face audio interview was conducted the insightful sharing on various aspects of uncertainty, transitions, mindfulness, and emotional intelligence was expressed. Results: The challenges in the health industry with having less doctors and advance equipment in the public sector was acknowledged by Dr. Anand and Ms. Anette. Dr. Davin on NLP and how neuro programming and mindfulness programmes can be utilized in medical training, educating patients through awareness, and in daily practice of one's life. Mrs. Rasee & Ms. Anette stressed on integration of alternative/complementary healing/therapies with hospitals and having counselors on call to provide emotional; and moral support to patients and people working in the hospitals in both provide and public hospitals. Conclusion: There is a need to bring awareness in acknowledging emotional intelligence, mindfulness, and integration of balance through neuro programming that can enhance people from all walks related to the health industry. Emotional intelligence should be taught at schools for children to acknowledge how the feel and speak about it. Further research encourages to be explored in rural areas and other clinics and hospitals on emotional intelligence and mindfulness training. Future studies can apply mindfulness training approaches on doctors and staff at the hospitals to test the efficacy of before and after practicing the mindfulness programme. It will be efficient to check the brain waves of before and after the practice of mindfulness training to check progress.

Keywords: transitions, health care systems, uncertainty, mindfulness, balance, emotional intelligence, Bangkok, Thailand

Introduction

Health care systems have an immense and valued responsibility to bring awareness and make available right medical care for the entire nation. Over the years, with the advancement of technology and the marketing of medical tourism various types of health care facilities and services have been advertised. Nevertheless, during the times of transitions there is growing awareness of disadvantages and issues faced during the times of uncertainty.

Government health care and any other product or service managed by government is the foundation of any nation. The core values of products and services reveal, restore, revive, and help progress a nation's economy, well-being, investment, and generations of populations within a nation.

With reference to Today online news, Thailand is facing various challenges in the health care system. As stated in May 2017, "the Federation of Physicians and Nurses released a table showing 18 state hospitals were suffering deficits. For instance, Pranangklao Hospital had a deficit of 355 million baht, Saraburi Hospital was 322 million baht in the red, and Uttaradit Hospital suffered a deficit to the tune of 277 million baht. The hospital deficit is just the tip of the iceberg. There have been concerns in the healthcare system that need to be urgently reformed," said the president of the Federation of Physicians and Nurses of regional and general hospitals, Pradit Chaiyabud," (Today Online, 2017).

State hospitals get income from three sources: The state Budget; operators of three healthcare schemes, namely the universal healthcare scheme, civil servants healthcare scheme and social security scheme; and money earned by hospital operators themselves, such as donations. Contributions from the universal coverage (UC) scheme account for the largest portion of state hospitals' income. Hospitals normally receive an annual Budget of about 80 million baht, depending on the size and population of the district. The NHSO also dispenses money according to the number of patients suffering specific illnesses, such as kidney failure or heart disease, (Today Online, 2017).

The challenge for the NHSO is how to manage the budget efficiently with limited funds and an ageing society. Moreover, civil society groups have urged the government to invest more in healthcare because it is a matter of long-term human security. According to Mr Viroj Na Ranong who is a research director for the health economics and agriculture sector at the Thailand Development Research Institute, his study reveals that the health expenditure of low-income countries is approximately 4 per cent of GDP compared to 8 to 13 per cent for high-income countries. Health expenditure in the US is 15-17 per cent. The civil service healthcare scheme is more expensive, because its finances are based on open-end funding, meaning beneficiaries can get expensive drugs and treatment, (Today Online, 2017).

On the other hand, with reference to the cover story about Health care on life support published by Bangkok Post in November 2017 by Paritta Wangkiat, Thailand's healthcare scheme is most critical since 2002. For more than ten years the system has been praised globally in providing healthcare access to over 48 million and filling the gap left by the government. Going back to the 1980s, there was an ambition to establish health care for all after witnessing the experiences of patients who could not afford medical treatment. The capitation method also allows government to fund universal coverage within its capacity limit.

Furthermore, in relation to a research under the American Psychosomatic Society on behavioral medicine conducted on examining the Changes in Brain and Immune Purpose produced by Mindfulness Meditation by Davidson, Richard J. PhD; Kabat-Zinn, Jon PhD; Schumacher, Jessica MS; Rosenkranz, Melissa BA; Muller, Daniel MD, PhD; Santorelli, Saki F. EdD; Urbanowski, Ferris MA; Harrington, Anne PhD; Bonus, Katherine MA; Sheridan, John F. PhD, 2003 revealed that the short program in mindfulness meditation does produce positive and demonstrates effects on brain and immune function. Moreover, various studies shows stress-related health complications are accountable for up to 80% of appointments to the doctor and account for the third highest health care expenditures, behind only heart disease and cancer. But few doctors essentially share to patients about how to decrease stress. Mind-body practices like yoga and meditation have been shown to reduce your body's stress response by reinforcing one's relaxation reaction and lowering stress hormones like cortisol. Additionally, Harvard Health publications disclose the numerous different mind-body methods, comprising meditation, yoga, mindfulness, cognitive behavioral skills, and positive psychology result in relaxation and reduction of medical services. With this the understanding of Emotional Intelligence and Mindfulness practitioners in the health industry can improve their health as well as their clients/patients.

This research study emphasizes and explores the demographics changes, healthcare transitions, alternative healing approaches, challenges faced during the time of uncertainty, assess experiences of experts in the Health Care system in Bangkok, Thailand. This study will enable respond to needs on the increasing of specific issues and pressure within the internal and external environment of health system in Bangkok, Thailand. Additionally, to understand more about how practitioners working in the Health Care industry are aware of their own emotional state before treating or providing any kind of service to their clients/patients.

Mindful training has been adopted in some primary schools and local universities in Thailand; however, the need for Mindful training is becoming a growing necessity which more schools, universities (local & international, private or public) should utilize this to bring awareness so students of all ages can find a balance from within and external factors.

Mindful training and bringing awareness in the Health Care Systems is very much needed to assess and making sure that service provided is being delivered from the expert is emotionally and mentally satisfied. Moreover, emotional intelligence is one of the five pillar, as stated by Daniel Goleman published "Emotional intelligence: why it can matter more than IQ." The growing consciousness of mental health and an apprehension with emotional intelligence are attaining significance as fundamental concerns for the twenty-first century. Educators, therapists, and parents have become more worried about how to enhance their children's emotional intelligence and there is more to that. Teenagers and young adults need it as this effects their productivity, increases stress, and may increase emotional, physical, and mental issues which may lead to serious illnesses.

As a result, the present study is conducted using a qualitative and quantitative research method. Difficulties in Emotion Regulation Scale (DERS) Serenity Programme consisting 36 statements on various aspects of emotions and how one feels and what one does about it using the calculation in percentage - Higher scores suggest greater problems with emotion regulation will be assesses as the experts being interviewed will fill in the questionnaires. The Philadelphia Mindfulness Scale (PHLMS) and the Global Health PROMIS 10 questionnaire is also being completed to bring awareness about the experts. The present study is designed to assess and analyze the transitions in the health cares in times of uncertainty in Bangkok, Thailand.

Research Objectives

The researcher is interested in the way body and mind is being taken of, and how experts in the fields of Health care mange the transitions during the times of uncertainty.

For this research the research objectives formulated are:

- 1. To determine whether the regular practice of Guided Mindful Meditation/training could improve patients' emotional intelligence.
- 2. To distinguish the effect of pressure from the internal and external environment of health system in Bangkok.
- 3. To evaluate the differences of between practitioners, experts, and doctors on various practices and handling transitions in the Health Care systems in Times of Uncertainty.
- 4. To bring awareness on valuable techniques and resources for practitioners, doctors, and patients to creating Balance & practicing Mindfulness in their daily life.
- 5. To analyze the shared experience of Mindfulness performed by the four experts in this research.

Rationale of Study

The researcher is aware of numerous cases that come her way and the need to start to understand how to deal and mindfulness training is essential for everyone in all working industries. With experience of being an Educator, Author, Academic and Creative Writing Coach, Reiki Energetic Master Teacher, and practicing Raja Yoga Meditation for many years conducting a research to facilitate options and

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resources is significant for providing the right Social and Emotional Learning (SEL) as a process that clearly develops life skills. It is an integrated approach that can support many people in self-awareness and management on handling emotions and behavior skillfully. Where service is being provided to clients and patients the balance of the service provider is as important.

Limitations of the Study

The results also depend on how the participants of this study understand the factors and deal with factors that bring awareness to his/her life and bring a change in his/her life. Some limitations of this study are:

- 1. The research is limited to Bangkok geographically.
- 2. There was a challenge on how much and whether the experts would be able to share as many aspects on transitions in the health care systems and provide suggestions in times of uncertainty from their perspectives. There is privacy and the researcher cannot monitor the experts but trust in what they share with due respect of their years of experience and work with reputable health corporations.
- 3. The participants perform their duties and follow the protocols of the place they work in. With due respect and privacy of the place suggestions offered were based on their experience and observation over the years, hence, they faced boundaries of what can be done and what cannot be done.

Health Care System & Challenges in Thailand

Thailand's health insurance system is a restructure that has been utilized over thirty years. The Medical Welfare Scheme (MWS), was established in 1975, to offer health care to the underprivileged. However, over the years The Thai health system has endured an incredible transformation. Additionally, objectives of Thailand's health restructuring include achieving widespread health insurance treatment with adequate level of assistances, limiting the growth of health spending, stimulating efficient health care delivery, distributing more health resources to the underprivileged and to rural areas, and sustaining the health system's ability to supply services. The financial sustainability of Thailand's health system is affected by aspects that are mutual across countries. Use of health services is anticipated to increase, determined by an aging population, rising national income, and the progress of medical technology. Income to pay for that rising trend in demand is less certain, affected by changes in the work force over a period of time and challenging demands for revenue in the government's budgeting process, (Ministry of Public Health, Thailand, 2007).

Alternatively, The Kingdom of Thailand has its own structure of traditional medicine called "Thai traditional medicine" (TTM). It initiated during the Sukhothai period (1238-1377) and advanced in equivalent with the country as a means of national health care until the early 20th century. The "Practice of the Arts of Healing Act B.E. 2542" outlines Thai traditional medicine as "the practice of the art of healing that is based on Thai traditional knowledge or textbooks that have been passed on and developed from generation to generation, or based on the education from academic institutes that the Professional Committee approved," (Archanuparp S. 1987). As quoted, the reasons of illness According to TTM, human illness can be triggered by the following factors: 1. Mystical power, e.g., ancestor's soul, prevailing spirit of the forest, evil spirits, and penance from a heavenly spirit of those who disobey. 2. Power of Nature, e.g., inequality in the four fundamentals of the body, inequity of heat and cold, and inequity of the body's balance. 3. Power of the universe, e.g., optimistic and pessimistic impacts from the sun, the moon and the stars on human health. 4. Kimijati, which may be reflected as bacteria in modern medicine. Furthermore, the impact of Western medicine, which was presented into Thailand by missionaries and Western physicians starting during the reign of King Rama III, that eventually increased. In 1888, Siriraj Hospital, the primary Western-style hospital and medical school, was legitimately opened. Primarily, both TTM and contemporary medical services were delivered and the medical school that trained both disciplines of medicine was established in 1889, (Subcharoen, P. 2003). In addition, the hospital also originated a health tourism programme for

tourists to join several health promotion programmes, i.e., health food, exercise, Thai massage, herbal steam baths, meditation, yoga training, learning about holistic medicine and TTM, and to visit numerous tourist attractions in Prachinburi Province, (Ministry of Public Health, 2004).

Thailand's health care system needs improvements. There are several areas that could be enhanced as there are problems with the system in the urban areas, but they are even worse in the rural areas. The rural areas have problems with the amount of time the doctors are there, and also the means of transportation to the clinics. The accessibility of doctors can be a lack of service and the choice of doctors wanting to be there in relation to the package they are offered could possibly influence their interest to work at rural areas.

In turn, doctors work long hours and if something occurred after an appointment, it would be a hassle to contact a specialist. This is because they could be in a different hospital or rural location with other patients. Another concern is that Thailand does not have operative emergency transportation system. The deficiency of number of ambulances, emergency situations can often lead to serious problems due to heavy traffic. In November 2006, a reform was made and the health programme was called the Universal Coverage Scheme. The Universal Coverage Scheme provides entirely free health care (at liberty) to any Thai citizen who does not have the Civil Servant Medical Benefit or the Compulsory Social Security Schemes, (Hoontrakul, Duangporn, 2008).

As follows, the Thais need an improved emergency transportation system in the urban areas. Also, a special lane for emergency vehicles are required. To fix the problem with patients not being able to meet their doctors after their appointments and the doctors could improve their approaches in communication. They could get more improved network service, or have specialty doctors available when called. This would increase the availability of the doctors and improve the process of medication, curing, and also attend to mindful needs in various locations in Thailand. However, in its extensive networks of Provinces there are hospitals and health structures of a relatively good standard within some 700 districts that have responded well in reducing the prevalence of communicable diseases (Saelee D, Tiptaengtae Sh, Tonsuthepweerawong C, Yana T, 2014).

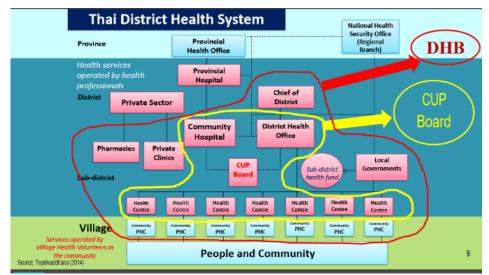


Figure 1: Thai District Health System

Source: Tejativaddhana, P., Briggs, D. & Tonglor, R (2016)

According to Chularat Sae (2015), publication in The Nation newspaper Nurses and doctors at public hospitals are seemingly under stress demanding to cope with time so all the patients can see a doctor. The inadequate circulation of doctors at state related to private hospitals is serious. Long queues are normal at state hospitals. The more famous the hospital, the longer the queue. Patients with enough money can skip these long queues by pursuing medical services from private hospitals.

Thus, to address this visible problem, it's significant to develop the right standards and requirements for the hospital doctors, nurses, staff, and patients. It is quite obvious the ignorance of Emotional Intelligence is not being taken care of and if the doctors, nurses and/or practitioners are stressful, how will the right needs of the patients and clients be met.

Demographic Structures for Health Care in Thailand

With reference to the World Health Organization Southeast Asia (2017), the life expectancy at birth and health life expectancy of Thailand has improved over the years as shown in figure 2

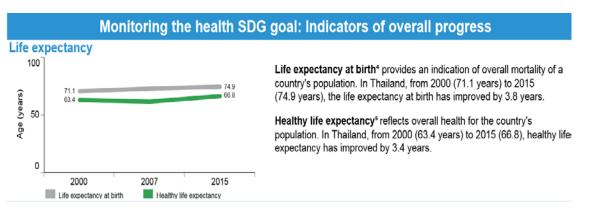


Figure 2: Life Expectancy in Thailand 2000-2015

Source: World Health Organization Southeast Asia (2017)

Moreover, Thailand faces challenges to further improve its education and health-care systems to various demographics with characteristics of environmental destruction from its speedy growth. The country has made remarkable development in providing education and health care to most of the population. Nevertheless, substantial inconsistencies continue, principally for poorer households and between rural and urban areas that require to be addressed. Education quality must be improved, principally highly proficient teachers, and increasing health-care costs should be controlled through reforms to improve efficiency in the delivery of services (Lathapipat, Dilaka 2011). Thailand also needs to address environmental damage from past growth and achieve greener growth in the future by reducing carbon emissions and other forms of pollution to the changing needs of demographics and the learning of new health practitioners.

Also, there is health inequality problems concerning care for the dependent elderly who require constant care because of their fragile health status. Strengthening and necessary development of current reforms are needed to gain greater access to health-care services in an affordable manner. The government should attempt to improve awareness among the public, especially the poor and underprivileged, about the existence of the health insurance system and its services. This is important for the elder demographics to gain awareness about the transitions in the health system of Thailand. In contrast, the record-keeping system for foreign workers needs to be enhanced so that they can get admittance to health services at a reasonable fee (Jitsuchon, Somchai 2012b).

The changes in the health policies have benefitted many and also affected many in the negative way. With the growing population in Thailand and the modern influence of social media, lifestyle, not appropriate consumption of healthy resources, sicknesses, illnesses, and manipulation of peers and/or society can also lead to inadequacy of understand the changes in the health system which some people may think its political and ignore the reforms and don't update themselves. The transitions in the policy and during the time in uncertainties have favoured private hospitals, drug companies and medical tourism. This can be a leading threat to universal healthcare.

A population pyramid of Thailand in 2016 published by Central Intelligence Agency, represented the age and sex structure of a country's population and shows the male and female populations broken down into 5-year age groups represented as horizontal bars along the vertical axis, with the youngest

age groups at the bottom and the oldest at the top. The form of the population pyramid progresses over time related to fertility, mortality, and international migration developments. The Age structure is 0-14 years: 17.18% (male 6,000,434/female 5,714,464), 15-24 years: 14.47% (male 5,030,930/female 4,839,931), 25-54 years: 46.5% (male 15,678,250/female 16,038,155), 55-64 years: 11.64% (male 3,728,028/female 4,208,624), 65 years and over: 10.21% (male 3,047,938/female 3,914,070) (2016 est, (CIA World Factbook, (2017).

It is understood that the age construction of a population influences a nation's significant socioeconomic problems. Thailand's rise with young populations require to invest more in schools, while the older populations are required to invest more in the health sector. This can support in determining affordable and suitable packages from public and private hospitals. However, the concern here is to also understand the practitioners, the pressure, and long working hours which need to be taken care of.

Mindful Training & Alternative Healing Approaches

In various literature and researches, findings have revealed a positive relationship between mindfulness and Emotional Intelligence (Baer et al., 2006; Brown & Ryan, 2003). Since the objective of Mindful Meditation is to improve the level of mindfulness, it can enhance with the progress of EQ. Practicing MM regularly can enrich the aptitude to understand one's own emotions (Brown, Ryan, & Creswell, 2007). Meditation training entails practitioners to carefully witness their thoughts and feelings moment-to-moment without any judgment or intrusion, practitioners tend to improve a higher inclination to be aware of their emotional state and change than those who do not. This contribution is supported by a study conducted by Feldman, Hayes, Kumar, Greeson, and Laurenceau (2007), which found that the level of mindfulness was connected positively with more transparency of feelings, attention to feelings, and lower disruption.

Furthermore, Feldman et al. (2007) found that people with a higher level of mindfulness inclined to recover fast from emotional distress associated with those with a lower level of mindfulness. Moreover, research found that practicing MM could enhance one's meta-cognitive ability (Zeidan, Johnson, Diamond, David, & Goolkasian, 2010), which reflected a higher-level cognitive capability that allows people to observe and control their thought process (Flavell, 1987). In the same manner, Gundlach, Martinko, and Douglas (2003) suggested, "without consciousness or inclination to decipher and understand how one produces beliefs about his/her own work capability, it will be difficult to clarify, comprehend, or progress existing self-efficacy levels."

Moreover, people who frequently practice Mindful Meditation can easily cultivate the ability to perceive and comprehend the emotions of others. Especially, being mindful permits an individual to focus their attention on how other people around them are feeling (Brown et al., 2007), which consequently helps them interpret emotional signs of others more precisely (Krasner et al., 2009). Thus, practicing Mindful Meditation can essentially improve the ability of individuals to regulate and control their emotions (Cahn & Polich, 2006).

Additional prospects of non-pharmacological interferences are based on several meditation methods. The influence of meditation on health has been a keen scientific interest. The consequence of these practices has been studied from diverse views (depression, anxiety disorders, eating disorders, addictions, and disorders caused by the use of psychoactive drugs) (Ospina et al., 2007; Balaji et al., 2012; Khanna and Greeson, 2013; Lakhan and Schofield, 2013). The influence of meditation on stress reduction, the prevention of psychosomatic disorders, blood pressure, and other cardiovascular diseases is a substance of numerous studies (Barnes et al., 2001; Grossman et al., 2004). Meditation can benefit chronic pain and musculoskeletal disorders, respiratory diseases, and dermatological problems. It may be helpful as a support of the immune system or as a symptomatic treatment of cancer (Ospina et al., 2007).

Mindfulness practice comprises several meditational approaches, for instance undertakings concentrating on breath and physical awareness or applying metaphors enlightening the principle of

mindfulness. All these methods have a mutual goal that is intensifying a subject's mindfulness. Such as, the capability to concentrate on the present moment and to observe without any judgment from internal or external compulsions, which are emerging at a given moment of consciousness. Mindfulness consequently consents one to stay "above" the specific content of views, emotions, or imaginations and empowers one to become aware of the process of consciousness itself (Kabat-Zinn, 2005). There are numerous psychotherapeutic schools and methods, which use the techniques based on the concept of mindfulness, for instance, Gestalt therapy or Morit's therapy. There are numerous new expanses combining a mindfulness method with cognitively behavioral therapy, like mindfulness-based cognitive therapy, dialectical behavior therapy, and acceptance and commitment therapy (Germer et al., 2005).

An evaluation by Chiesa et al. (2011) suggested a substantial progress of selective and executive consideration in early stages of meditation, which targets at cultivating focused attention. Non-focused, long-term attention can be enhanced through following phases of meditation, which are considered by non-judgmental observation of external and internal stimuli. Moreover, this method can improve the capability of working memory and many executive functions.

In contrast, Complementary and alternative medicine (CAM) or alternative healing approaches from Reiki Energetic Healing, Acupuncture, various Meditation approaches, Aromatherapy, Ayurveda remedies, Nature therapy, Ozone therapy, detox, chelation therapy, cupping, naturopathy and much more. CAM practices are reflected as a portion of traditional medical practices which connect to historical roots in the progressing world. They have continued in the West though they have been viewed as traditional medicine, the keen interest in recent years, as options to the Western model of medicine (Zhang, 2002). Moreover, the increase with various researches and collective support to alternative healing methods is increasing globally. With this awareness, it's important to sustain the healthier approaches than to increase consumption of medicines with high risk of side effects.

Emotional Intelligence and Difficulties in Emotion Regulation Scale (DERS) – Serenity programme

In 2006, a research conducted on Chulalongkorn medical students' in enhancing emotional skills of medical students was a valuable insight to understanding emotional intelligence for doctors. The results showed that having hobbies, participating in supplementary activities and genuine need to be doctor associated with high emotional intelligent scores may be helpful for evaluation and development of emotional intelligence in medical students. The human brain encompasses two minds and two different kinds of intelligence: rational and emotional. These two profoundly diverse modes of consciousness interrelate to establish our mental life. The emotional and rational minds are semi-Lotrakul P, Inseeyong V, Chaninyuthwong V, independent faculties (Wongpiromsarn Y, Suwanmaitree S, Wanitrommanee K, Sukmak K, Usaha S, Thongngen A 2002). They operate in tandem most of the time: emotion contributes to, and informs the operations of the rational mind, which refines and sometimes vetoes the inputs of these two partners interact well. Therefore, both E.Q and I.Q abilities enhance each other. Reflecting the Thai culture, there is a high social expectation of a "Doctor". There is not only a requirement of a knowledgeable doctor but also a need of a doctor who is empathetic, has devotion toward patients, high morality, and high degree of tolerance, good communication skills, and good self-control. Understanding the emotional intelligence of a doctor during the practice of being a medical student may be essential for developing emotional and intellectual growth so the future doctors can assess emotional quotient during the practice and study as Chulalongkorn medical students.

The questionnaire used in the study was established by a team of Thai psychiatrists and psychologists based on Thai culture that emphasized goodness, mindfulness, peace, happiness as well as competency. People who recognized their feelings and aims in life would set a direction to progress and handled their emotions properly (Suppapitiporn S, Kanchanatawan B, Tangwongchai S 2006).

On the other hand, Gundlach et al. (2003) debated that emotional awareness and emotional regulation are reflected as prime aspects that enable the perception of self efficacy because they help people from being interfered by their negative emotion when creating natural acknowledgement between their abilities and consequences. Nonetheless, Tsai, Chen, and Liu (2007) reasoned that a positive mood not only enables people to reminisce an exceptional performance that they had experience in the past, however it also enriches their positive feelings about their past experiences, thus permitting them to increase expectation about their aptitude. Additionally, their study conducted on employees and supervisors from insurance companies in Taiwan resulted to a strong positive relationship between positive mood and task-specific self-efficacy measure (Tsai et al., 2007).

Mayor and Salovey (1997) suggested that EQ entails of four functions. First, appraisal and expression of emotion in the person referring to the capability to understanding one's own deep emotions and be able to voice out naturally. Second, appraisal and expression of emotion in others refers to the capability to perceive and understand the emotions of other people (Goleman, 1995). Third, observing of emotion in the self, denotes to the ability to regulate one's own emotion, which is significant for the person to recuperate when experiencing a negative emotion. Fourth, using emotion to implement in decision making shows the ability to direct one's own emotions to help improve performance.

In Thailand, Department of Mental Health (MOH) has categorized the emotional intelligence (EI) into three classifications. Firstly, "Intelligence" signifies one's awareness, motivation, and capability to handle problems. Secondly, "Goodness" directs the ability of controlling oneself such as emotions and desires. Lastly, "Happiness" infers the ability of living happily, being proud of oneself (Ramajitti Institute and Rajanukul, 2007).

In contrast, a survey conducted by The Shepell fgi Research Group (2008), over 40% of call center agents associate with angry clients daily. They are frequent situations of victims of verbal aggression from clients or reflect themselves in a state of emotional dissonance, for instance, they have to sustain a professional, cooperative and considerate attitude while feeling angry, sad or diminished. Such emotional staff may illuminate why there are considerably more emotional problems, such as anxiety and depression, in call centers than in other workplaces (19% vs 15%; The Shepell fgi Research Group). These results showed that there is a requirement for interferences that could assist and encourage services for mental health emotion regulation strategies among call center employees.

As for this research Emotion regulation was assessed with six subscales of the Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004; Labbé, Côté, Gosselin, & Dagenais, 2012), nonacceptance of emotional responses (6 items), difficulties engaging in goal-directed (5 items), impulse control difficulties (6 items), lack of emotional awareness subscale (6 items), limited access to emotion regulation strategies (8 items), and lack of emotional clarity (5 items). The DERS was created to evaluate difficulties in emotion regulation. The inadequacy of emotional awareness subscale reveals an inattention to, and lack of awareness of, emotional responses (e.g., "When I'm upset, I take time to figure out what I'm really feeling", reverse scored), while the impulse control difficulties reflects difficulties remaining in control of one's behavior when experiencing negative emotions (e.g., "When I'm upset, I have difficulty controlling my behaviors"). Higher scores for each subscale indicate greater difficulties in emotion regulation (i.e., more emotion dysregulation). With the brief explanation stated, this makes it clear and an opportunity for the experts' part of this research to monitor and reflect the emotional regulation.

Mindfulness scale (PHLMS) & Global Health PROMIS 10

This researched used the The Philadelphia Mindfulness Scale (PHLMS) (Cardaciotto et al. 2008) which is 20-item, bi-dimensional measure assessing distinct components of present-centered awareness and acceptance that is based on both clinical and non-clinical samples without any meditation experience. Awareness items evaluates observing of internal and external experiences. Acceptance items evaluates non-judging and openness to experience and refraining from attempts to escape or avoid them. The assessment of present-moment awareness and acceptance which is valuable to practitioners working in the health industry. Clients and patients are regularly visiting and each one of them have different diagnosis and/or visit for a specific purpose. With this, the research can gain an

insight on the present-moment awareness and acceptance of themselves and the situation they are dealing with at that point. For example, 'I am aware of what thoughts are passing through my mind. When someone asks how I'm feeling, I can identify my emotions easily. I tell myself that I shouldn't have certain thought' are some statements asked where the experts can reflect and reconnect with their state of mind and emotions on how they deal with a stressful environment being mindful and/or find it a challenge to do so.

On the other hand, Global Health- PROMIS Global Health (10 items) was used to know about the expert's health condition. This can support the research on emotional regulation, stress and mindfulness working in the hospital and/or clinic. This also enables understanding that during the times of uncertainty how one manages with being aware of self-health and well-being. Questions were asked under subscales of physical and mental health. For instance, "would you say your health is, quality of life, physical health, how would you rate your mental health, including your mood and your ability to think?" are some of the questions from the ten items. Hence, the use of these questionnaires are essential for this research study to establish a valuable insight of practitioners.

Neuroimaging studies explore the neural mechanisms essentially in mindfulness meditation practice with methods such as EEG (Slagter et al., 2007) and functional MRI (Farb et al., 2007; Lutz et al., 2008; Farb et al., 2010; Goldin and Gross, 2010). Various researches have revealed and show insight on how neural systems are modifiable networks and changes in the neural structure can occur in adults as a result of training. Since the early 1980s, mindfulness meditation has escalated and gained profound awareness in mainstream health care and medicine because of evidence that it's good for emotional and physical health. For instance, facilitating to decrease anxiety, stress, depression, chronic pain, psoriasis, headache, high blood pressure, and high cholesterol. Several research findings suggest that it can improve immune function.

Methods

This is a qualitative research method research where four experts from the Health industry will participate in bringing awareness and valuable information.

The researcher conducted a mix of a quantitative (brief) and qualitative research (more focus) where an in-depth- interview face to face, open ended questionnaire about the Health Industry, Challenges, Health Care Financing, Health Care Management through email and Emotional Intelligence (DERS) questionnaire with four participants where answered.

The first participant was Dr. Davin Narula who is the Hospital Director of Sukumvit Hospital, Bangkok, Thailand who will be sharing about Mindfulness, Emotional Intelligence and the changes in the Health Care system and emergency treatment in Bangkok over the years. Dr. Davin completed the Ouantitative & Oualitative Research requirements where an in-depth- interview face to face, open ended questionnaire, The Philadelphia Mindfulness Scale (PHLMS), Emotional Intelligence (DERS) questionnaire, & the Global Health PROMIS 10 questionnaire about the Health Industry, Challenges, Health Care Financing, Health Care Management was answered. The second participant was Mrs. Rasee Govindani, who is a certified birth doula with DONA International and a postpartum doula and childbirth educator in process of being certified by Childbirth International. She is also a Gottman Institute Bringing Baby Home Educator who has taught the English childbirth education classes at Bumrungrad International Hospital from 2011 until 2016. She has attended over 100 births in Bangkok hospitals. She is also a breast cancer survivor who was treated at Bumrungrad International and currently being followed at Chulalongkorn Hospital. Along with a fellow breast cancer fighter she started Beyond Boobs, a source for information and support for breast cancer fighters and survivors in Bangkok (Facebook link to Beyond Boobs: www.facebook.com/beyondboobsbangkok). Mrs. Rasee completed the Quantitative & Qualitative Research requirements where an in-depth- interview face to face, open ended questionnaire, The Philadelphia Mindfulness Scale (PHLMS), Emotional Intelligence (DERS) questionnaire, & the Global Health PROMIS 10 questionnaire about the Health Industry, Challenges, Health Care Financing, Health Care Management was answered.

The third participant was Ms. Anette Pollner a senior Counselor at NCS Counseling Center, Bangkok who also completed the Quantitative & Qualitative Research requirements where an in-depthinterview face to face, open ended questionnaire, The Philadelphia Mindfulness Scale (PHLMS), Emotional Intelligence (DERS) questionnaire, & the Global Health PROMIS 10 questionnaire about the Health Industry, Challenges, Health Care Financing, Health Care Management was answered. The fourth participant was Dr. Anand Sachamuneewongse, Orthopedic Surgeon at Samrong General Hospital, Bangkok, Thailand who will be sharing about Mindfulness, Emotional Intelligence and the changes in the Health Care system and emergency treatment in Bangkok over the years. Dr. Anand completed the Quantitative & Qualitative Research requirements where an in-depth- interview face to face, open ended questionnaire, The Philadelphia Mindfulness Scale (PHLMS), Emotional Intelligence (DERS) questionnaire, & the Global Health PROMIS 10 questionnaire about the Health Industry, Challenges, Health Care Financing, Health Care Management was answered.

The four expert participants from different areas of the Health industry provided an insight to the principal objective of the research topic and assess experiences in the transitions of the health systems, where knowing more about the organizational structure and responsibilities to cope with the existing system in the health industry. Mindfulness draws upon the recent convergence of modern science and it is the cultivation of both attention skills and emotional balance. Therefore, the questionnaire on Difficulties in Emotion Regulation Scale (DERS) Serenity Programme consisting 36 statements on various aspects of emotions and how one feels and what one does about it using the calculation in percentage - Higher scores suggest greater problems with emotion regulation will be assessed as the four experts being interviewed will fill in the questionnaires.

All questionnaires are in English. The questionnaire given is on the Difficulties in Emotion Regulation Scale (DERS) - Serenity programme, The Philadelphia Mindfulness Scale (PHLMS), Emotional Intelligence (DERS) questionnaire, & the Global Health PROMIS 10. Questionnaire survey through email was an open ended questionnaire about the Health Industry, Challenges, Health Care Financing, and Health Care Management with eight main questions that would accomplish the objectives. Questions such as, Health Systems may be perceived as a specific institutional involvement in the implementation of tasks related to the maintenance and improvement of a patient's health. What are your views and opinion on this with the job you do? What are the challenges you face when it comes to sharing knowledge and information to the patient? What is it that you can say, want to say, or don't want to share/say to the patient when dealing with their health issues/service given to them? How do you deal and what are the current pressures within the internal & external environment of health systems in Bangkok, Thailand? What are the changes/transitions in the health care system and management and how has that affected you? In times of uncertainty what approaches do you take? Share about your daily work responsibilities. What are your views on Alternative healing therapies? Is it important to be Mindful and be aware of Emotional Intelligence? Please share your views. What would you like to change about the Bangkok health care system & anything you feel needs changes in the place you work to have better approaches to enhance healthcare management and communication? Is there or has been a health problem you dealt or is dealing with? How did or are you coping with it? Do you apply the similar approaches with your patients?

Face to Face audio recorded interview consisted of four main questions: Has this research been beneficial for you? Give your views on answering the questionnaire on Difficulties in Emotion Regulation Scale (DERS) – Serenity programme, Global Health & the Philadelphia Mindfulness Scale (PHLMS); Are you able to understand more about Emotional Intelligence & Mindfulness? Share your experience; Have you meditated or taken and alternative healing before? How did you feel and what you recommend to people concerned about health or dealing with health problems? What are your views on reforming, and/or developing a new horizon to Bangkok's Health care system and management?

The research method was a mix of qualitative and quantitative approach. Descriptive tables, analysis showing the four different Emotional Intelligence Regulation Scale & Mindfulness scores by the four experts were applied.

Formulated Hypotheses

- 1. There is an impact of Difficulties in Emotion Regulation Scale (DERS) Serenity programme on performing hospital/clinic duties.
- 2. There is an influence of being Mindful when performing hospital/clinic duties.
- 3. Not being aware of emotional, mental, and physical stress can affect productivity and service provider.
- 4. Doctors and professionals working in the clinic/hospitals are aware about Emotional Intelligence and Transitions in the Health Care Systems in Thailand.
- 5. There is awareness in emotional regulation pattern.

Results

For Quantitative requirements difficulties in Emotion Regulation Scale (DERS) – Serenity programme, Global Health & the Philadelphia Mindfulness Scale (PHLMS) were answered by the four experts.

Table 1 shows the differences in scores and how each expert answered the Global Health PROMIS 10, Emotion regulation scale (DERS), and The Philadelphia mindfulness scale (PHLMS). In relation to the health scores, the four experts' scores are quite similar. The global physical health score of Dr. Davin: 13, Mrs. Rasee: 14, Ms. Anette: 13, & Dr. Anand: 12 depict that each of them are healthy and aware of their health status with regular check-up. On the other hand, with the global mental health score two experts have the same score (Mrs. Rasee and Ms. Anette 16), Dr. Davin has the highest score (17) and Dr. Anand with the lowest (13). This depicts that Dr. Davin, Mrs. Rasee, & Ms. Anette have their scores more towards very good as for Dr. Anand as good mental health. This shows that all the experts' have good physical and mental health.

Moreover, regarding emotion regulation each expert have similar scores in terms of non-acceptance of emotional responses, difficulties engaging in goal directed behavior, impulse control difficulties, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity. From the table it shows that all four experts do not have a problem and almost never have a problem not accepting emotional responses and only sometimes based on a situation may feel so. In terms, of difficulties engaging in goal-directed tasks when upset sometimes have some difficulties and about half the time may have difficulty in engaging in goal directed tasks but almost always can get things done.

Regarding, impulse control difficulties, Dr. Davin, Mrs. Rasee, & Dr. Anand can control their behaviors and seldom become out of control. However, Ms. Anette sometimes may have difficulty controlling her behavior. This shows that the participants are in awareness of their emotions and know how to control and when to voice out. When it comes to lack of emotional awareness all participants are emotionally aware about their feelings and know how to acknowledge their emotions. Ms. Anette scores the highest with being aware of her emotions and pays attention on how she feels and believes that are feelings are valid and important. Additionally, regarding to limited access to emotion regulation strategies, all four participants do not feel they limited access to emotion regulation strategies. Ms. Rasee may feel it sometimes based on an unexpected case; however, Ms. Anette, D. Davin, Dr. Anand do not feel overwhelmed too easily, do not believe that they will end up feeling very depressed. This shows all four participants can manage their emotions and do not jump into conclusions about their emotions. There will be times when they may take some time to feel better about a situation, but in most cases they are fine.

In relation to the lack of emotional clarity, three participants (Dr. Davin, Mrs. Rasee, & Dr. Anand) have emotional clarity almost always and almost never feel they have no idea about they feel. In

contrast, Ms. Anette may sometimes have difficulty in making sense out of her feelings and sometimes has no idea how she feels about a situation. This shows that all four experts have clarity almost always about their emotions.

Conversely, regarding mindfulness scale, in reflection to the awareness score all four experts are aware (mindful) about their emotions and conscious about their thoughts. Conversely, Dr. Anand's score is slightly lesser showing that there might be times he may not be aware (mindful) about his emotions at all times and about his thoughts at all times. However, this does not mean that the participants are not aware of their emotions. In relation to the acceptance score, Dr. Anand's has the highest score depicting that he is more acceptable (mindful) about his emotions, mood, feelings, and aware of how the air feels against his face. Dr. Davin, Mrs. Rasee, and Ms. Anette have similar scores depicting they accept and are mindful about their emotions and thoughts.

Table 1: Scores of Global Health PROMIS 10, Difficulties in Emotion regulation scale (DERS), and The Philadelphia mindfulness scale (PHLMS).

	Questions	Dr. Davin	Mrs. Rasee	Ms. Anette	Dr. Anand
Global Health PROMIS 10 Scale 1-5 for health Scale 1-10 for pain					
Global physical health score	Global 03: In general, how would you rate your physical health? Global 06: To what extent are you able to carry out your everyday physical activities such as walking, climbing stairs, carrying groceries, or moving a chair? Global 07: How would you rate your pain in average? Global 08: How would you rate your fatigue on average?	Raw Score: 13 T-score: 42.3	Raw Score: 14 T-Score: 44.9	Raw Score: 13 T:Score: 42.3	Raw Score: 12 T-Score: 39.8
Global mental health score	Global 02: In general, how would you say your quality of life is: Global 04: In general, how would you rate your mental health, including your mood and your mobility to think? Global 05: In general, how would you rate your satisfaction with your social activities and relationships? Global 10: How often have you been bothered by emotional problems such as feeling anxious, depressed or irritable?	Raw Score: 17 T-Score: 56.0	Raw Score: 16 T-Score: 53.3	Raw Score: 16 T-Score: 53.3	Raw Score: 13 T-Score: 45.8
	Questions	Dr. Davin	Mrs. Rasee	Ms. Anette	Dr. Anand
Difficulties in Emotion Regulation Scale (DERS)					
1.Non-acceptance of emotional responses (NONACCEPT) SCORE		11	7	6	8

Transitions in the Health Care Systems in Times of Uncertainty – Exploring views by Experts through Mindfulness & Emotional Intelligence in Bangkok, Thailand

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2. Difficulties	8	13	15	13
engaging in goal				
directed behavior				
(GOALS)				
SCORE				
3. Impulse control	9	10	13	9
difficulties				
(IMPULSE)				
SCORE				
4. Lack of	26	27	30	26
emotional				
awareness				
(AWARE)				
SCORE				
5. Limited access	13	18	15	15
to emotion				
regulation				
strategies				
(STRATEGIES)				
SCORE				
6. Lack of	12	11	14	11
emotional clarity				
(CLARITY)				
SCORE				
Mindfulness-				
Philadelphia				
Mindfulness				
Scale (PHLMS)				
Awareness Score	42	45	50	39
Acceptance Score	25	25	21	31

In relation to the Qualitative study, open ended questions and a face to face audio recorded interview was conducted. The first participant is Mr. Dr. Davin Narula who is the Hospital Director and Internal Medicine Specialist of Sukumvit Hospital, Bangkok, who is above 45 years old. His years of expertise and currently in the late 60s of age has enables him to see changes, potential in the young specialists, and provide insightful knowledge. He usually sleeps early by 10:00 pm and he surely likes his job. He usually discusses his daily stress with his voice and believes in one's thought process applying the NLP approach in dealing with stress and emotions. His view on Neuro-linguistic programming thinking approach enhances and enables a person to change perception, it's scientific, logical, guide to communication, psychotherapy, and behavior through neurological process in a positive way where one has the ability and will power to change the thought process which can in turn change the cell system in decoding and become fixated on any thought that can cause stress. He believes and practices sleeping early and waking up early.

When asked: *Health Systems may be perceived as a specific institutional involvement in the implementation of tasks related to the maintenance and improvement of a patient's health. What are your views and opinion on this with the job you do?* Dr. Davin's feedback was prevention beats treatment, health promotion is the key approach where education on health and self-care is better than consistent consumption of medication. However, this may vary depending on any patient with serious illnesses and chronic diseases. Through education life will be better physically, mentally, and emotionally. Positive thinking can help in cell repair and people should become more aware of this.

When asked: What are the challenges you face when it comes to sharing knowledge and information to the patient? What is it that you can say, want to say, or don't want to share/say to the patient when dealing with their health issues/service given to them? Dr. Davin's feedback was he shares with his patient. The only problem he faces is sometimes it can get time consuming and next patient may get upset. At times, patients may not appreciate honesty.

When asked: *How do you deal and what are the current pressures within the internal & external environment of health systems in Bangkok, Thailand?* Dr. Davin's feedback was to keep updated with new studies and resources that are created by health experts, Harvard, and many more. External pressure can be the patient's stubbornness. Also, when there is a psychological problem doctors would send patients to the psychiatrist where in many cases may not be needed. Hospitals need to have better care on wellness through communication (counselling, NLP approach development, listening to patients, etc) and see the severity then it can be guided, and recommended to another approach.

When asked: *What are the changes/transitions in the health care system and management and how has that affected you?* Dr. Davin's feedback was on emphasizing the transitions in technology where patients embrace individual treatment with the help of medical knowledge in the internet. Artificial Intelligence is enhancing and has transformed the medical industry with various types of cures, surgeries, and science is being researched and taken more seriously in present times with the help of information technology.

When asked: *In times of uncertainty what approaches do you take? Share about your daily work responsibilities.* Dr. Davin's feedback was he discusses with his family members and people around him. He never discusses patients' information as they are always kept confidential.

When asked: *What are your views on Alternative healing therapies? Is it important to be Mindful and be aware of Emotional Intelligence? Please share your views.* Dr. Davin's feedback was his trust in knowledge, studies, research, and meditation. Emotional stability plays a role on physical health as well. There is a difficulty in healing the body if the mind is not ready and not healthy as well. Being mindful is essential and meditation surely helps.

When asked: *What would you like to change about the Bangkok health care system & anything you feel needs changes in the place you work to have better approaches to enhance healthcare management and communication?* Dr. Davin's feedback was emphasis on Time. Having time for patients is effective and providing a meditation class may restore and help patients. Patients appreciate time given to them.

When asked: Is there or has been a health problem you dealt or is dealing with? How did or are you coping with it? Do you apply the similar approaches with your patients? Dr. Davin's feedback was on focusing on all aspects from medical, social, and spiritual conducts to gain the most benefit in health.

In relation to the face to face audio recorded interview which consisted of four main questions: *Has this research been beneficial for you? Give your views on answering the questionnaire on Difficulties in Emotion Regulation Scale (DERS) – Serenity programme, Global Health & the Philadelphia Mindfulness Scale (PHLMS); Are you able to understand more about Emotional Intelligence & Mindfulness? Share your experience; Have you meditated or taken and alternative healing before? How did you feel and what you recommend to people concerned about health or dealing with health problems? What are your views on reforming, and/or developing a new horizon to Bangkok's Health care system and management?*

Dr. Davin's views and feedback was that it's important to be professional and with the help of journals and various researches one can be mindful as well as become aware of being emotionally intelligent. He stated, 'we have a very interesting network in our brains and when we have repetitive thoughts in increases our cells with those thoughts slowly covering up our brain with thoughts that are not needed in a couple of days feeling depressed. However, if one goes in a positive way, one can also change the thought process and the cells can change from feeling depressed to happiness through the neuro network programming in the brain.' He expresses the motivation behind a research conducted like this for Bangkok and sees this as a benefit that can bring awareness to many people. However, the questionnaires can be good, but it may leave out many aspects of a situation, so based on certain situations the answers may vary. With this research and interview he has been able to share many aspects and sees this as the opportunity to understand more about being mindful and be aware of emotional intelligence.

He suggests and emphasizes on three factors: sleep, exercise, and energy. Sleeping between 10pm-4pm is the best time for body/cell repair (for instance tissue repair, growth hormone – melatonin is produced, blood supply to the muscles, and energy is restored etc) and this is a significant period of time where every person should embrace and become aware of. With the current lifestyle and consumption of unhealthy intakes affects the patterns of sleep. More people put work as a priority where there is no balance and that constant thought of wanting to complete work and sleeping late also affects sleep patterns.

The body needs oxygen and energy needs to be restored so that one can perform at the best in every way. Hence, exercise is important, 150 minutes per week or 30 minutes five times a week will help oxygen flow in the entire body system. Energy is vital for human physiology. God food given by nature is mandatory, which means fruits and vegetables are essential for the diet. There is nothing extra as all the elements the body cells need are in the fruits and vegetables that can help in stem cells. Stress cannot be seen but felt, thus, energy and other aspects need to be taken into consideration.

With regard to mindfulness and emotional intelligence in the context where people do sleep and exercise yet face problems. Dr. Davin's addressed aspects on spiritual requirements practicing a positive lifestyle, believing in the presence of God/Divine where people should understand the spiritual aspects of the context written in the religious books to assist in embracing a positive lifestyle. Many people don't understand and are not aware of the spiritual aspects or guidance shared by masters. Having gratitude every day and not asking what one does not have but thanking about what one has brings about an amazing positive change and a fulfillment of goals can be achieved. On the other hand, meditation is important and a proven fact by various researches and scientists on how the approach and practice helps in cell repair, brain function and neurology. Meditation if guided properly and understood clearly can surely benefit anyone in many ways; for instance, if a person is overworked can always feel better after a thirty – sixty minutes meditation. Meditation is a growing awareness and is being practiced over centuries where people are becoming aware at present times and people should practice it as it helps in positive thinking, cell repair, healing, and being healthy. Medication only is not always the only way but utilizing sleep, conserving energy, exercise, and meditation is effective.

When concerns about society, norms, and how hospitals can add meditation as a mindful program where addressed Dr. Davin was impressed and saw this as a great aspect of concern. He encouraged if the right people would develop programs and propose to the hospitals there could be a possibility of acknowledging the approach for well-being programs. Moreover, studying medicine is a big step and medical schools apply medicine to treat. For psychological concerns patients are sent to the psychiatrist and medical practitioners' don't treat them. Emotional intelligence and being mindful is not very much addressed and he agrees with the researcher that if the combination of approaches are being proposed and taught this could be quite beneficial for the health industry not only for patients but for people working in the health industry. He encouraged with the fact that if society understands about this more there would definitely be a huge change in the health industry. He looks forward to integrate two ways into the health programs as this has never been thought and taught in medical schools. Medical schools focused more on treatments and medication to befit the drug industry. Certain aspects people don't talk about to avoid conflicts which is an ethical dilemma. Hence, emotional intelligence, psychology and mindfulness programs are needed with medication too. The second participant is Mrs. Rasee Govindani is Self-employed birth and postpartum doula and childbirth educator aged between 36-40 years. She self-employed, but support women at whichever hospital they birth at; mainly her clients birth at Samitivej, Sukumvit and Bumrungrad International. Having worked since year 2010 she has gained the expert knowledge and experience. Usually she sleeps early around 10 pm, however, it depends on the day. She likes her job very much so.

She stated that, 'stress and emotions are two different things. She does not often let herself become stressed. If she feels overwhelmed, she considers the situation and fixes what she can, then let go of the rest. She is not the one to dwell on the things she cannot control or change. If she needs to unwind she likes to read or watch a movie or TV show or go window shopping. She is a bit of an emotional

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eater so she likes comfort food and sometimes a glass of wine. As for emotions, she knows that feelings come and go, and just because she feels something in the moment, it does not accurately reflect reality. She likes to feel my emotions and she don't shut them out, run away from them, and does not overthink them.'

In relation to sleep disturbance from work being called often called in the middle of the night to attend a birth. She only take on two to three clients a month so the sleepless nights are limited. It takes her a few days to recover from overnight births. She sleeps a little more for a couple of days and does not do a lot during the day and being used to this as part of her job.

When asked: *Health Systems may be perceived as a specific institutional involvement in the implementation of tasks related to the maintenance and improvement of a patient's health. What are your views and opinion on this with the job you do?* Mrs. Rasee's feedback was on how she supports a couple during pregnancy as well as during labor and birth. This means that, during pregnancy, she talks to a pregnant client about food, exercise, sleep, and how she can prepare her body (and mind) for labor. A normal labor and birth begins with a healthy woman; how she takes care of her body can impact how her pregnancy progresses, how her labor unfolds, and how well she recovers in the postpartum. She also focuses on her mental well-being and try to make sure that she's in a good place in her head as well as in her relationship with her partner. Mrs. Rasee supports that both aspects are important when entering into labor.

As a postpartum doula she tries to make sure that her client, who has just given birth and is likely breastfeeding, continues to eat healthily and takes care of herself by sleeping as much as she can, taking time to herself each day, and eventually, moving her body in a way that is comfortable for her. She also checks in with her client emotionally during this time as hormonal changes can affect how she feels immediately postpartum as well as in the coming days and weeks. Most women will experience the "baby blues" and a small amount will go on to develop postpartum depression. She reminds women of what is normal and what isn't so she can continue to be supported in an appropriate way.

As a childbirth educator she does the combination of what she has already covered and tries to prepare a pregnant woman physically, mentally, and emotionally for the journey ahead.

When asked: What are the challenges you face when it comes to sharing knowledge and information to the patient? What is it that you can say, want to say, or don't want to share/say to the patient when dealing with their health issues/service given to them? Mrs. Rasee's Feedback was she wears many hats and each has limitations so it depends on the services she is providing a client. As a doula she shares only what she feels is relevant to the client and what she wants to know. Information is kept as positive as possible while also making sure the client knows everything she needs to know to make the right decisions for herself in the hospital during labor and birth. She does not share negative outcomes and does not make things too personal. She does not her own birth story (which was negative). Her job is to support her client in achieving the birth she wants, even if it's not the birth Mrs. Rasee would choose for herself. She will talk through her choices with her client (if she wants) and give her the risks and benefits of each option that is (or may be) presented to her by her doctor or medical team, but ultimately she will make the choice that's right for her.

As a childbirth educator her job is to give all the information provide evidence-based childbirth education to couples who are planning all sorts of births: natural, medicated, surgical, and so on. She gives pros and cons for all choices available and tries to be as objective as she can. She shares her personal choices and stories of births she has attended as examples and "possibilities."

When asked: *How do you deal and what are the current pressures within the internal & external environment of health systems in Bangkok, Thailand?* Mrs. Rasee's feedback was in in Thailand doctors have all the power and most Thai patients do what the doctors tell them to do, without doing any of their own research or asking questions about risks and benefits. Doctors are also not used to explaining or defending their decisions. She works with a lot of foreigners who, in their home countries, are used to being able to ask questions, get second opinions, and say no to procedures they

are not comfortable with, and so on. So there's always a need for balance when she works with clients. She makes sure all her clients understand the hierarchy in Thai hospitals and how best to navigate that. It usually comes down to choosing the right care provider who is used to supporting foreign patients and understands their culture. At the same time she has to remind her clients that this is not their home country and things will be different. Hence, there's always that pressure of making sure that everyone gets what they want and everyone feels safe with the decisions made.

As a survivor of breast cancer, she definitely felt the pressure of doing what her doctors wanted her to do, without questioning them. But she also learned through her diagnosis and treatment that she had to advocate for myself, that she had to ask the questions, and that she was entitled to information.

When asked: *What are the changes/transitions in the health care system and management and how has that affected you?* Mrs. Rasee's feedback was when it comes to pregnancy and birth, as time goes on, women are treated as patients who are sick rather than women who are experiencing a very normal biological process. It's as if women don't know how to be pregnant and birth babies anymore without doctors managing their entire beings. This means, for her, that women no longer have an instinct about their bodies. They no longer trust their bodies to work. She has to remind them that they are made to birth their babies while their doctors remind them how "dangerous" birth is and how women need their doctors' help to give birth. There's definitely conflict between how she perceive birth and how it is managed by the medical institutions.

There's also a rush to medicate every symptom. As a mother she sees this when her daughter is sick, usually with the common cold. She believes in her body's ability to fight these, but when she is unsure, such as if her fever lingers too long or she's struggling to be comfortable, She knows that there is only one or two doctors that she can take her to who will not automatically prescribe a number of medication she really doesn't need. Same goes for pregnancy and birth. Spotting during pregnancy? Here's progesterone. Having contractions? Here's magnesium. Let's not forget iron and calcium supplements as well as prenatal vitamins—all things that women don't necessarily need if they are eating well. This is just one more way of telling women that their bodies are simply not enough.

When asked: In times of uncertainty what approaches do you take? Share about your daily work responsibilities. Mrs. Rasee's feedback was her job is uncertain. Not every woman labors the same way and not every birth goes the same way so she always tries to be open to being surprised. She tries to remember that nothing is permanent and nothing stays the same and it is significant to learn to go with the flow. She holds on to the core things that are important to her-her daughter, family, health, work--and those anchor her when everything else is uncertain.

Her routine varies from day to day. The morning is for getting her daughter fed and dressed and sent off to school. She might have a full day of meetings with potential clients, contracted clients, clients who have given birth, and so on. Sometimes she teaches private classes and postpartum/breastfeeding support. When she does not have those she usually stays home to catch up with other work or emails or so on. Then she picks her daughter up from school and they go to whatever activity she has or they go play or go home and hang out until dinnertime. She might work after she's asleep, but usually it's her time to watch Netflix or read.

When asked: *What are your views on Alternative healing therapies? Is it important to be Mindful and be aware of Emotional Intelligence? Please share your views.* Mrs. Rasee's feedback was that there is a strong mind-body connection and she thinks a positive outlook and attitude can only be helpful in living life, especially when dealing with illness. But does believe that having a positive outlook can cure sickness? No. she believes in medicine. She believes in science. But she also believes in miracles and sometimes wonderful, unexplainable things happen. There's no telling what can make someone "feel" better, which can lead them to be stronger or healthier or more willing to fight. She is open to most things.

She doesn't believe in "alternative" as much as "complementary." She thinks that acupuncture, homeopathy, reiki, and the like can be helpful along with "conventional" medicine. (Which really is

just medicine.) She knows many people that have benefitted from acupuncture and chiropractic care, and there is more and more research on these. Anything without real research she views with a grain of salt. She is happy for clients to try whatever they like, as long as it's not going to hurt them. She does not believe, say, substituting chemotherapy with energy work if you have cancer. What she does know and what science has shown people is mindfulness and living life with gratitude does something to a person's brain to make one happier and healthier. So she does believe it is important to find the good in even the worst places.

When asked: *What would you like to change about the Bangkok health care system & anything you feel needs changes in the place you work to have better approaches to enhance healthcare management and communication?* Mrs. Rasee's feedback was she thinks Bangkok hospitals could benefit from a more integrated approach to healthcare, in every field. For example, a medical doctor being willing to work with other doctors as well as practitioners of complementary therapies, so a patient is offered all options to improve their health. There's also quite a bit of competition between doctors in the same field so it's nearly impossible to get objective second opinions at the same hospital. Doctors need to become a little more professional and realize that the objective is to help the patient.

Doctors need to learn to explain things better and go over actuals risks and benefits of procedures as well as offer alternatives rather than tell the patient that this is their only choice and discourage questions. Consent is considered given even before it's really asked for. A patient has the right to understand the risks and benefits or procedures and medication. They have the right to do research. They have the right to more opinions. And they have the right to say no.

Additionally, in some fields Bangkok is keeping up with the rest of the world, such as oncology, and obstetrics are years and years behind current research and practices. For example, family-centered Cesarean sections, where babies are allowed to be skin-to-skin with their mothers immediately after surgery and there is no separation of mother and baby. Even in the "best" hospitals, this is considered outrageous. There is also a fail to mothers of premature babies by not encouraging kangaroo care and breastfeeding. They know better, but fail to do better.

When asked: *Is there or has been a health problem you dealt or is dealing with? How did or are you coping with it? Do you apply the similar approaches with your patients?* Mrs. Rasee's feedback was sharing about when she was diagnosed with breast cancer in June of 2016 and underwent surgery (a mastectomy of my right breast), chemotherapy, and radiation. She is currently on hormone therapy. She has come through the worst of it and life will forever be different, but she take things one day at a time and does not worry too much about the future that is not in her control. Some days are better than others. Some days she can handle her worries and fears better than other days.

Cancer and childbirth are very different things, but as she has always said that labor and birth are very mental, getting through cancer was also that way for her. She tried to stay positive and count her blessings, even on the worst days. She did not believe that would make her healthier, but it made dealing with treatment easier. It helped her find joy in between the difficult moments. She learned to be her own advocate when she was sick so she encourages her clients to do the same, to ask for what they want and fight for what's important to them. To research and ask questions and get expert opinions.

With reference to the face to face audio recorded interview which consisted of four main questions: *Has this research been beneficial for you? Give your views on answering the questionnaire on Difficulties in Emotion Regulation Scale (DERS) – Serenity programme, Global Health & the Philadelphia Mindfulness Scale (PHLMS); Are you able to understand more about Emotional Intelligence & Mindfulness? Share your experience; Have you meditated or taken and alternative healing before? How did you feel and what you recommend to people concerned about health or dealing with health problems? What are your views on reforming, and/or developing a new horizon to Bangkok's Health care system and management?*

Mrs. Rasee's views and feedback on this research was positive. The research made her think more about the work she does and how she does not view it as work and not medical related. This was a

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good reflection when questionnaires were answered and the process gone through or what approaches are being utilized for her clients. Her life is busy and usually from one client to the other. As part of labor, understanding emotional intelligence is mandatory and having labelled those helps people to understand better. When it comes her own emotional intelligence she is a good compartmentalizer and focuses on the work she does and does not take things to her heart as the work she does cannot be seen that way. There will be days where there is a hard birth and she would talk it through or have a good cry when she is at home. She has been very good in separating her emotions and her clients' emotions. She has taken her work seriously and never mixed the two. As for alternative healing or meditation she does breathing exercises and as doulas she tells her clients about relaxation (guided and visualization), mindfulness, and breathing exercises. When she walks into her room she always relaxes her mind and clears her head for a fresh start and being at peace.

On the other hand, the transition in the health industry with alternative healing or complementary medicine has emerged over the years with better access for clients/patients. For instance, back then there were less Reiki practitioners, Tapping, NLP, EFT, Chiropractors, and many more, but at present times this is much more available. This is not integrated with the hospital system, conventional medicine and is separated. It would be better if it was integrated. There is much more research and information available online now for side effects of chemotherapy for cancer patients and acupuncture helps with those side effects. As a cancer survivor, she has seen the changes and noticed the changes over years. It will always be good if there is a team to support the person and have integrated approaches. Doctors don't do much of the referrals so doulas usually end up making referrals for chiropractor care and acupuncture for the clients. She encouraged researches conducted like this for data and she believes in researches where it can benefit many people with valuable insight.

She shared her experience on how she managed emotions and days she broke down during the time she had breast cancer where she had to find balance between her, her work, and daughter with the help of her good friend who reminded her that her emotions where not real but based on the situation and how it can change. Emotion changes, they are not real and are not concrete. She embraced her emotions at that very moment and knew it will change eventually. She is not the person who would block her emotions and also tells her clients to not rationalize their emotions and they would feel exactly what they feel and it was fine to feel emotional. An emotional state is not a lifetime conclusion but a situational outcome. The sad will surely go away and there is no need justify. Sadness is not bad and how should one be happy if one does not know sadness.

The third participant is Ms. Anette Pollner a senior Counselor at NCS Counseling Center, Bangkok who is above 45 years old and been part of the health industry for 20 years. She usually sleeps at around 1:00-2:00am and likes her job. As a counselor dealing with stress and emotions is part of her training and is still part of her practice to work on her own issues. She does that through her own personal mindfulness practice, through creative writing and through Jungian/Gestalt dream work. She also has therapy and therapy supervision sessions. Over the years, she has become more aware. She tracks her emotions and reactions – this is especially important in order to be aware of what some people call counter-transference, where the therapist projects their own issues on to the client.

Countertransference is a dangerous dynamic and not at all helpful for the client, and can only be managed through constant self-exploration and self-awareness. She attended many group trainings in the US, at Esalen and at the Process Work Institute in Portland, Esalen, where she learned a lot about herself and about group dynamics, personal dynamics and communication. She also led creative writing and dream work groups on a regular basis, and that also helps her to understand herself.

When there is a life crisis or when she is sick, she gets scared and sometimes angry, like everyone else. Sometimes that's very natural and appropriate. She does not try to avoid or bury unwanted emotions, she tries to explore them and what they can tell her about herself. She deals with stress and emotions (and welcomes all emotions) by engaging with them and trying to understand them. She also tries not to add on extra stress by expecting to 'fix' all this. Some things are very difficult to deal with and tries to show herself compassion.

Ms. Anette's expressed how she is one of those people who can sleep in almost any situation. The only times when she was unable to sleep because of stress was on the night before surgery, or when her partner broke up with her, or when someone close to her was dying. And when she didn't know if her Thai visa would be renewed or if she would be deported.

Moreover, when she studied to be a counselor she worked on the night shift, the so-called 'graveyard shift' from midnight to 8AM at a large international investment bank in London. She surprised herself by how easy it was for her to switch to a night shift. She has always been a night person and does her best creative work after 10PM. Until recently, she found it difficult to get up early in the morning, so she mostly sees clients after 10AM, and often until 9PM/10PM which works out very well for those many clients who are working and cannot see a counselor during 'normal' office hours.

In turn, some of her friends who are geneticists at Cambridge University, the gene for attachment to the Circadian cycle (day/night cycle) is strongly switched on (has to be awake in the day and has to sleep at night), weakly switched on (usually night person) or even switched off at all. Hers probably hardly there and is very flexible with sleeping.

When asked: *Health Systems may be perceived as a specific institutional involvement in the implementation of tasks related to the maintenance and improvement of a patient's health. What are your views and opinion on this with the job you do?* Ms. Anette's feedback was for most of her adult life she lived, studied and worked in the UK with its public health system, the NHS. Before that she lived in Germany which has a mandatory public health insurance system which also means that almost everybody is covered. She believes that this is vital to individual health and to the health of a society.

Unfortunately, in Thailand, the public health system is not easy to access for foreigners and many foreigners have either no health insurance or their insurance doesn't cover mental health. This means that they have to pay for their own therapy. On the other hand, in the UK the public health system also doesn't cover mental health issues very well and she paid for all her own therapy both as a counseling student and before, as an 'ordinary' client working out her issues, out of her own pocket. But it was definitely worth it.

NCS Counseling Center offers people a discount for the sessions if they don't have a lot of money. This can sometimes be tricky since she has to rely on clients being honest with her and it has happened once or twice that a client has tried to take advantage of NCS. But generally, she want people to be able to come as she lives on what she earns. She would very much prefer to have a regular salary and the center to work out the finances.

When asked: What are the challenges you face when it comes to sharing knowledge and information to the patient? What is it that you can say, want to say, or don't want to share/say to the patient when dealing with their health issues/service given to them? Ms. Anette's feedback was counseling and psychotherapy are client-centered. In other words, the client is in charge of their healing process.

It is her job to enable the client to understand themselves better and to find ways of healing themselves. Therefore, it would be inconceivable to her not to share knowledge and information about the client's situation or mental health condition with them. On the contrary, she tries to explore it together with them as much as possible and encourage them to find out more for themselves.

She does explains how counseling works in general, what kind of counseling school she personally belong to (humanistic/integrative), and how the counseling center operates. She also explain whatever issues come up and some of the theories about psychology, psychotherapy and sometimes even sociology, politics, social studies etc. In all of this, she follows the client's lead. Some people want a lot of explanation. Others prefer to follow their immediate experience and probable google the rest at home. She would never even consider withholding information of any kind that is relevant to the client.

Counseling is confidential and information about the client is only shared with her clinical supervisor. Nobody else has access to the information except of course the client themselves.

When asked: *How do you deal and what are the current pressures within the internal & external environment of health systems in Bangkok, Thailand?* Ms. Anette's feedback was that main issues are the fact that most clients have to finance the counseling themselves, the lack of 'modern' psychiatrists in Bangkok, and the preponderance of the American 'medical' system of mental health, which means that hospital psychiatrists and even general doctors over-prescribe anti-depressives and anti-anxiety drugs. This would not happen so much in Europe where she was trained and where she grew up.

Talking therapies for Thais are not part of the general health system in Thailand which is very disappointing. They do have many Thai clients but they are mostly well-educated, wealthy, and have often spent parts of their lives outside Thailand. The main issue in her view is a lack of Thai counselors and psychotherapists who do NOT practice according to the American medical model but focus on the talking therapies.

Another huge issue is the lack of a suicide prevention hotline (the English language version of the Thai Samaritans is only a 'callback' system where someone will call you back within a week!) and the way suicidal patients are treated at Thai hospitals. There were cases where hospitals refused to accept suicidal patients.

On the other hand, hospitals with dedicated psychiatric units have frequently not cooperated very well with them and other counseling centres.

When asked: *What are the changes/transitions in the health care system and management and how has that affected you.* Ms. Anette's feedback was there is not much change since it is operated outside the system as a private health centre and has worked in Thailand for 9 years now.

When asked: In times of uncertainty what approaches do you take? Share about your daily work responsibilities. Ms. Anette's responsibility is to her clients and to be the very best counselor she can be and help them to process their psychological and emotional issues.

Sometimes she feels uncertainty, but she works it out together with her client. She can get a lot of feedback from them, directly or indirectly through body language and behavior. The one thing that is difficult for her in the context of a private counseling centre is the issue of short notice cancellations.

The counseling centre has a policy of a 24 hour cancellation notice period and if someone cancels within less than 24 hours, the session has to be paid. This is absolutely necessary or the centre would have to close.

When asked: *What are your views on Alternative healing therapies? Is it important to be Mindful and be aware of Emotional Intelligence? Please share your views* Ms. Anette's feedback was she practices mindfulness and other forms of meditation every day. To her, this is one aspect of the deeper psychological work she does, also every day, and also links in with her creative life as a writer and creative writing coach.

She believes working on her underlying issues is very important, not just for therapists, but also for other health practitioners. The relationship with the client/patient is a form of therapeutic relationship, and affects the healing process enormously. In England, she also worked as a staff counselor at Bart's hospital in London where most of the clients were nurses and hospital staff (excluding doctors who had their own service). She experienced there firsthand how stressful the lives of hospital staff were, how difficult the dynamics in the workplace could be, and how it affected the patients. Sadly, this service has suffered greatly from funding cutbacks since then

When asked: What would you like to change about the Bangkok health care system & anything you feel needs changes in the place you work to have better approaches to enhance healthcare management and communication? Ms. Anette's feedback was for about 2 years, the centre had access to a very good Thai psychiatrist who worked at various hospitals in Bangkok and had studied in the US. He was very supportive of talking therapies, came twice monthly for intervision meetings and worked with those clients who needed psychiatric help.

The centre never had a psychiatrist like this before or since – and he went back to the US. Thus, that's what we need. Generally Thailand needs more education in the value of talking therapies and more access to them.

When asked: Is there or has been a health problem you dealt or is dealing with? How did or are you coping with it? Do you apply the similar approaches with your patients? Ms. Anette's feedback was she has had a number of health issues during her time in Thailand.

She dealt with them in the Thai health system – with varying success and varying levels of stress. Some of her experiences were excellent, others were very bad. Since she deals with mental health, there is no direct way she can apply this to her own work, except to remember that every client is a person, a person with a life, a life history, with emotions, with complex life circumstances. A person who deserves my help and respect. Being seriously ill is very frightening.

Interestingly, there is one sentence she remembers from a young Thai dentist who she only saw once. She said, 'I learned to treat every patient as if they were my own family member.' She would never forget that. Of course, in psychotherapy we cannot treat own family members. But clients are unique human beings who deserve respect and positive regard.

In relation to the face to face audio recorded interview which consisted of four main questions: *Has this research been beneficial for you? Give your views on answering the questionnaire on Difficulties in Emotion Regulation Scale (DERS) – Serenity programme, Global Health & the Philadelphia Mindfulness Scale (PHLMS); Are you able to understand more about Emotional Intelligence & Mindfulness? Share your experience; Have you meditated or taken and alternative healing before? How did you feel and what you recommend to people concerned about health or dealing with health problems? What are your views on reforming, and/or developing a new horizon to Bangkok's Health care system and management?*

Ms. Anette's views and feedback on this research was positive and certainly encourages more works like this being produced to help enhance various health practices and well-being programmes. She found it interesting to write down her thoughts and reflect on it. As a counsellor she deals with uncertainty all the time. The clients are always in uncertainty and the tolerance level in psychotherapy is much more. Most of the clients are private clients so she does not work directly with the hospital. Understanding about emotional intelligence and being mindful is a prerequisite for counselling and psychotherapy. One must be self-aware, non-judgmental, and not project to them becoming useful to the clients. In contrast, it is difficult to reflect something so profound like mindfulness in a questionnaire. Also for meditation it is more of a free form, thus, it cannot be answered specifically in a questionnaire. Some questions may not be suitable for a mindful activity and it is situational. Mindfulness cannot be measured completely with questions used like that.

In relation to emotional intelligence and mindfulness as a practical practice is better and she was under therapy for five years before seeing her first client. She worked with her deep issues first before meeting her clients. Psychotherapy also works with mindfulness and she even works on dream patterns, visualization, and deeper work is being done like meditation where one gets into this zone where one does not connect with time and space. Being a creative person enables her to use her own materials in an imaginative way and help the clients.

Ms. Anette has embraced various approaches in her life. She has done various workshops and trainings over the world and done meditation. She has also done the shamanic journey, mindfulness workshops in various aspects, and classic meditation. She likes the aspect of mindfulness where it connects one with sensory inputs and directs you to being in the moment and not worrying about the future which is very similar with Gestalt therapy. Mindfulness has become aware over the recent years and with the western influence through research, workshops, and promoting it. Mindfulness needs to connect with the life one lives and not just a practice once in a while, let's be mindful for ten minutes or a trend people like to follow. It is an everyday individual practice. Meditation is not about being calm but connecting with the world inside a person and the world outside a person through a

deep process and being in the moment. Being in the moment is not an easy thing and for many therapies that is a practice.

From experience she has noticed that many people are guilty about the past and anxious about the future. What is missing is living in the moment. Everything is either a memory or a fantasy. This is where meditation and creativity comes in where it helps in being in the moment. Also, when dreaming, that is also being totally in the moment. Personally she believes being calm is not the case but connecting to reality is very important. Emotions are very important and one must feel what one feels and being calm in a state of happiness or sadness can be a problem as emotions are to be shown or expressed. Even when going through a surgery at that point a person is quite scared and their emotions are justified. Nurses lack the knowledge and counseling to connect with the patients where they should be able to communicate with the patient rather than telling the patient not to be afraid when the patient will be afraid. It is a natural situation that should be addressed properly and acknowledge the patients feeling especially with the terminally ill. Doctors and nurses should have training programmes to learn how to acknowledge and communicate with patients. This is very important for nurses and doctors and can benefit hospitals. Sometimes, assumptions are made based on statistics and it's necessary for doctors in Thailand to become aware and connect with patients so it can help in the treatment process.

Long walks in the parks and nature therapy is very important. In Japan this is a very important approach and Thailand should adopt this approach in the healing process. Listening to the sounds of the nature is essential for human physiology and health. The public hospitals and private hospitals in Thailand are very different. Private hospitals have more services and public hospitals don't. Personally she feels that hospitals should have counselors on call so they can always see the patient and provide emotional support to patients and staff. Having experienced working as a counselor in a hospital in London, nurses' sick rate is very high as nursing jobs are very stressful. It is because of the hierarchy and when they are sick they would stay home and sometimes nurses would bully each other. Then counseling services were offered for nurses which was a great opportunity and one nurse came for counseling and she learnt that that nurse was the bully. Once they admitted the problem there was healing provided which was good and counseling is very important. In public hospitals in Thailand nurses are very much in charge and some very old nurses have worked in hospitals for a very long time and empowerment is needed. It's important to see how the main nurses run certain department which can be good and some bad. Hence, empowerment and counseling services is very much needed to enhance a better service and healing for nurses too. This will become a health benefit and invest in better machines for public hospitals in Thailand to provide a better healing atmosphere for everyone.

The fourth participant was Dr. Anand Sachamuneewongse, Orthopedic Surgeon at Samrong General Hospital, Bangkok aged between 30-35 years of age has been in the health industry for seven years. He usually sleeps late around 1:00am and likes his job. He expressed that stress cannot be avoided especially when patient's complication arises. He usually keeps his stress to himself; however, does consult and/or discuss with co-workers and family members. When overwhelmed with stress or emotions he would usually exercise or play sports.

When asked: *Health Systems may be perceived as a specific institutional involvement in the implementation of tasks related to the maintenance and improvement of a patient's health. What are your views and opinion on this with the job you do?* Dr. Anand's feedback on this aspects suggests that even though patient's improvement and maintenance for health is the main role, he believes that the health system consists of interconnected institutions and individuals that have a role not only to restore and maintain but to also educate the community regarding disease prevention knowledge and activities.

When asked: What are the challenges you face when it comes to sharing knowledge and information to the patient? What is it that you can say, want to say, or don't want to share/say to the patient when dealing with their health issues/service given to them? Dr. Anand's feedback was apart from the actual treatment communication is a significant part. When it comes to dealing with patient's

emotions and understanding there is no straightforward guideline to follow. On the other hand, one of the challenges that are faced that nowadays there is an easy access to resources and patients will be doing some research and read about their conditions before coming to the hospital. Sometimes, the information read will contradict with what they have read and that may cause some problem along the course of their treatment. In such cases telling them they are wrong can cause conflicts which can delay or affect the outcome of the treatment. All the doctor can do is to provide unbiased evidence and information that can help them make the decision in relation to the treatment choices. Also, government funding is limited and many people cannot afford treatments and updated equipment are needed.

When asked: *How do you deal and what are the current pressures within the internal & external environment of health systems in Bangkok, Thailand?* Dr. Anand's feedback was one of the main pressures in the internal environment is the increase in patients in the tertiary health care center including both inpatients and outpatients. For the outpatients department there are limited number of doctors and patients have to wait for a long period of time for their treatment. For inpatients department the number of beds and operating room available often causes delay for surgical treatment and prolong hospital stay. These problems are caused by the external environment factors which is due to the insufficient government funding. He deals with this problem by communicating with the patients and give them the information about the current situation to avoid conflicts.

When asked: *What are the changes/transitions in the health care system and management and how has that affected you?* Dr. Anand's feedback was on the awareness of the updated equipment in the teaching hospitals and doctors have better access to research database. Patients have easier access to health care services due to advance referral systems and communication methods. Content over the internal can easily go viral and the sue rate has increased over the years. In order to avoid public conflicts or law suits, patients are usually recommended specialized physicians in tertiary care center without no proper initial treatment and because of this the number of the patients in the tertiary care center are increasing.

When asked: In times of uncertainty what approaches do you take? Share about your daily work responsibilities. Dr. Anand's feedback was he discusses with his family members and consults with other seniors at work if necessary.

When asked: *What are your views on Alternative healing therapies? Is it important to be Mindful and be aware of Emotional Intelligence? Please share your views.* Dr. Anand's feedback was on having limited experience on Alternative healing therapies. He is not against it and does encourage patients to take alternative healing of their choice as long as it does not harm them physically. He thinks that it's important for patients to be mindful and be aware of their emotional intelligence.

When asked: What would you like to change about the Bangkok health care system & anything you feel needs changes in the place you work to have better approaches to enhance healthcare management and communication? Dr. Anand's feedback was on limited government funding and inadequacy of resources in the rural areas. With not enough equipment and physicians to investigate or perform treatments patients are then referred to the tertiary care center where the number is increased with insufficient resources and causes delay for the treatment.

When asked: *Is there or has been a health problem you dealt or is dealing with? How did or are you coping with it? Do you apply the similar approaches with your patients?* Dr. Anand's feedback shared his experience in being affected with chronic back pain which affected his work performance. Instead of getting rid of the pain with medication he tried physical therapy and exercise which helped him reduce the pain and improve symptoms. He applies similar approach with his patients so it can help them with reducing the pain and improve the symptoms.

With reference to the face to face audio recorded interview which consisted of four main questions: Has this research been beneficial for you? Give your views on answering the questionnaire on Difficulties in Emotion Regulation Scale (DERS) – Serenity programme, Global Health & the Philadelphia Mindfulness Scale (PHLMS); Are you able to understand more about Emotional



Intelligence & Mindfulness? Share your experience; Have you meditated or taken and alternative healing before? How did you feel and what you recommend to people concerned about health or dealing with health problems? What are your views on reforming, and/or developing a new horizon to Bangkok's Health care system and management?

Dr. Anand's views and feedback on a research conducted like this is very interesting. He never thought about emotional intelligence and being mindful and through the questionnaires and research process it helped him understand and become aware about being mindful. There were times when things can be stressful and he usually focuses on the root cause and finds a solution. He exercises and listens to music to reduce stress and find a solution. His patients usually embrace religious beliefs to stay mindful and their thinking process for Thai people. The questions addressed in the mindfulness scale are fine; however, in every situation things are dealt differently and a deeper approach is needed outside the questionnaire. During his training years, in the case of emergency and the patient dies there is no straight protocol but right facts and information is given to the family to share the news. Emotions are taken into consideration and enough information is given for emotional support leaving out an elaborated information that can affect them emotionally and mentally. At that particular time the situation is quite delicate and avoiding a blame game or pointing out any hesitance that was taken at that point.

He has never meditated and does advice his patients to practice the approach. He does consider to take meditation and nature therapy into consideration. Alternative healing like Ayurveda and acupuncture is good. From his experience working in public hospitals is that people versus the doctors as there were patients and less doctors which was the main problem because there was a delay in treatment and less beds for patients. Many patients did get anxious and with not enough equipment affects the patients in the tertiary care center. Paramedic systems in Thailand is needed to be monitored and improvement is very much needed. Even though there has been some improvement, the government should take all this into consideration to help the country's well-being and emotional intelligence should be trained and practitioners and staff should be educated about these aspects.

Discussion

This research study emphasized and explored the demographics changes, healthcare transitions, alternative healing approaches, challenges faced during the time of uncertainty, assess experiences of experts in the Health Care system in Bangkok, Thailand. Additionally, to understand more about how practitioners working in the Health Care industry are aware of their own emotional state before treating or providing any kind of service to their clients/patients a qualitative and quantitative research study was developed to accomplish the objectives.

Conflicts of interest

There are no conflicts of interest.

Ethics approval

The experts had given the consent so did not face any ethical conflict.

Conclusion

All four experts fulfilled the questions and answered all questionnaires on the Philadelphia Mindfulness Scale (PHLMS), Emotional Intelligence (DERS) questionnaire, & the Global Health PROMIS 10. Dr. Davin, Mrs. Rasee, Ms. Anette, and Dr. Anand are aware of their emotional intelligence in terms of thoughts, environment, mood, and there are situations that may bring some difficulties to deal with the internal state, however, they tend to find the suitable way to deal with it. Dr. Anand did not usually focus on emotional intelligence and mindfulness terminologies and this research guided him to reflect on several aspects that relate to him and his work in a deeper perspective.

In contrast, when the face to face audio interview was conducted the insightful sharing on various aspects of uncertainty, transitions, mindfulness, and emotional intelligence was expressed. The challenges in the health industry with having less doctors and advance equipment in the public sector was acknowledged by Dr. Anand and Ms. Anette. Dr. Davin on NLP and how neuro programming and mindfulness programmes can be utilized in medical training, educating patients through awareness, and in daily practice of one's life. Mrs. Rasee & Ms. Anette stressed on integration of alternative/complementary healing/therapies with hospitals and having counselors on call to provide emotional; and moral support to patients and people working in the hospitals in both provide and public hospitals. Many psychotherapeutic schools and approaches, which use the techniques based on the concept of mindfulness, for example, Gestalt therapy or Morit's therapy, which was addressed by Ms. Anette as she had practiced these during her training. Detailed answers can be read in the analysis part and the answers relate to the current situation stated in the literature review. Due to limited funding and a well-developed health care systems people in the rural areas and people in the lower social status do face difficulties in having suitable medications.

There is a need to bring awareness in acknowledging emotional intelligence, mindfulness, and integration of balance through neuro programming that can enhance people from all walks related to the health industry. The essential approaches to emotional, mental, physical, and spiritual practices are needed throughout the Nation which will progress in every way. It is not only the profits that need to be focused on but the implementation of integrated programmes that nurture every person as their very right to health benefits.

The understanding of how mindfulness training and emotional intelligence programmes enhance brain waves and human physiology has been researched and with this research it will certainly help anyone reading the perspective of experts in the health industry. Furthermore, emotional intelligence should be taught at schools for children to acknowledge how the feel and speak about it. Often, people feel guilty of how they feel or people around them make them feel guilty and direct them to be quiet about it and/or not being able to speak the truth. Being mindful is a necessary resource everyone can embrace. This research does acknowledge that if hospitals would introduce guided mindful meditation or training is could improve patients' emotional intelligence, there is an effect of pressure from the internal and external environment of the health system, and different practitioners experience different challenges and transitions. Conversely, every participant practices mindfulness differently and in some cases mindfulness is not even thought about which in this case because of this research it encourages the partipants to reflect and consider various approaches to mindfulness training.

The research was limited to Bangkok geographically. There was a challenge on how much and whether the experts would be able to share as many aspects on changes in the health care systems and provide suggestions in times of uncertainty from their perspectives. The participants perform their duties and follow the protocols of the place they work in. With due respect and privacy of the place suggestions offered were based on their experience and observation over the years, hence, they faced boundaries of what can be done and what cannot be done.

Further research encourages to be explored in rural areas and other clinics and hospitals on emotional intelligence and mindfulness training. Future studies can apply mindfulness training approaches on doctors and staff at the hospitals to test the efficacy of before and after practicing the mindfulness programme. It will be efficient to check the brain waves of before and after the practice of mindfulness training to check progress.

References

Archanuparp S. (1987). "Current situation of Thai traditional medicine", In: Wibulpolprasert S. and Chuengsatiensup K. (eds.) Thai Traditional Medicine: The Wisdom of Self-reliance (Bangkok: H.N. Stationary and Printing, 1987), pp. 13-55.

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. Assessment, 13(1), 27–45. doi:10.1177/1073191105283504

Balaji P. A., Varne S. R., Ali S. S. (2012). Physiological effects of yogic practices and transcendental meditation in health and disease. N. Am. J. Med. Sci. 4, 442–44810.4103/1947-2714.101980

Barnes V. A., Treiber F. A., Davis H. (2001). Impact of transcendental meditation on cardiovascular function at rest and during acute stress in adolescents with high normal blood pressure. J. Psychosom. Res. 51, 597–60510.1016/S0022-3999(01)00261-6

Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. Psychological Inquiry, 18(4), 211–237.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. Journal of Personality and Social Psychology, 84(4), 822–848. doi:10.1037/0022-3514.84.4.822

Cahn, B. R., & Polich, J. (2006). Meditation states and traits: EEG, ERP, and neuroimaging studies. Psychological Bulletin, 132(2), 180–211.

Cardaciatto, L., J. D. Herbert, E. M. Forman, E. Moitra, and V. Farrow. (2008). The assessment of presentmoment awareness and acceptance: The Philadelphia Mindfulness Scale. Assessment 15: 204–23.

Charoensukmongkol, P. (2013). The contributions of mindfulness meditation on burnout, coping strategy, and job satisfaction: Evidence from Thailand. Journal of Management & Organization, 19(5), 544–558. doi:10.1017/jmo.2014.8

Chiesa A., Calati R., Serretti A. (2011). Does mindfulness training improve cognitive abilities? A systematic review of neuropsychological findings. Clin. Psychol. Rev. 31, 449–46410.1016/j.cpr.2010.11.003 [PubMed] [Cross Ref]

Chularat Saengpassa (2015). It's Time to fix Thailand's dire healthcare system, The Nation, Site visited: <<u>http://www.nationmultimedia.com/politics/Its-time-to-fix-Thailands-dire-healthcare-system-30271664.html</u>> Accessed on: 17th November 2017

CIA Factbook (2017). Thailand population, Site visited:

<<u>https://www.cia.gov/library/publications/the-world-factbook/fields/2010.html</u>> Accessed on: 17th November 2017

Farb NA, Anderson AK, Mayberg H, Bean J, McKeon D, Segal ZV. (2010). Minding one's emotions: mindfulness training alters the neural expression of sadness. Emotion. 2010; 10:25–33. [PubMed: 20141299]

Farb NAS, Segal ZV, Mayberg H, Bean J, McKeon D, Fatima Z, Anderson AK. (2007). Attending to the present: mindfulness meditation reveals distinct neural modes of self-reference. Social Cognitive and Affective Neuroscience. 2007; 2:313–322. [PubMed: 18985137]

Feldman, G., Hayes, A., Kumar, S., Greeson, J., & Laurenceau, J.-P. (2007). Mindfulness and emotion regulation: The development and initial vali-dation of the Cognitive and Affective Mindfulness Scale-Revised (CAMS-R). Journal of Psychopathology and Behavioral Assessment, 29(3), 177–190.

Flavell, J. H. (1987). Speculations about the nature and development of metacognition. In F. E. WEINERT & R. Kluwe (Eds.), Metacognition, motivation, and understanding (pp. 21–29). Hillsdale, NJ: Erlbaum

Germer C. K., Siegel R. D., Fulton P. R. (2005). Mindfulness and Psychotherapy. New York: Guilford Press

Goenka, S. N. (2002). Meditation now: Inner peace through inner wisdom. Seattle, WA: Vipassana Research Publications.

Goldin PR, Gross JJ. (2010). Effects of mindfulness-based stress reduction (MBSR) on emotion regulation in social anxiety disorder. Emotion. 2010; 10:83–91. [PubMed: 20141305]

Goleman D. (1995). Emotional intelligence. New York: Bantam,

Gratz, K., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. Journal of Psychopathology and Behavioral Assessment, 26(1), 41–54.

Grossman P., Niemann L., Schmidt S., Walach H. (2004). Mindfulness-based stress reduction and health benefits. A meta-analysis. J. Psychosom. Res. 57, 35–4310.1016/S0022-3999(03)00573-7

Gundlach, M., Martinko, M., and Douglas, S. (2003). Emotional intelligence, causal reasoning, and the self-efficacy development process. The International Journal of Organizational Analysis, 11, 229-246.

Hays, R. D., Bjorner, J. B., Revicki, D. A., Spritzer, K. L., & Cella, D. (2009). Development of physical and mental health summary scores from the patient-reported outcomes measurement information system (PROMIS) global items. *Quality of Life Research*, 18(7), 873-880.

Hoontrakul, Duangporn. (2008). "Development of Age-Friendly Primary Health Care: Case Study of One Primary Care Unit." *Thai J Nurs Res* 12.2 (2008): 131-141. Database. 28 Apr 2012.

Jitsuchon, Somchai (2012b), "Poverty and inequality reduction policies in Thailand", a paper presented at the workshop "Poverty Reduction Policies in Asia, Trends, Strategies and Challenges", organised by Korea Institute for Health and Social Security, September.

Kabat-Zinn, J. (1994). Mindfulness meditation for everyday life. New York, NY: Hyperion.

Kabat-Zinn, J. (2005). Wherever you go, there you are: Mindfulness meditation in everyday life. New York, NY: Hyperion.

Kabat-Zinn J. (2005). Bringing mindfulness to medicine: an interview with Jon Kabat-Zinn, PhD. Interview by Karolyn Gazella. Adv. Mind Body Med. 21, 22–27

Khanna S., Greeson J. M. (2013). A narrative review of yoga and mindfulness as complementary therapies for addiction. Complement. Ther. Med. 21, 244–25210.1016/j.ctim.2013.01.008

Krasner, M.S., Epstein, R.M., Beckman, H., et al (2009) Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians, journal of the American Medical Association, 302, 1284-1293.

Labbé T. P., Côté, G., Gosselin, P., & Dagenais, I. (2012). Évaluation des difficultés de régulation émotionnelle : adaptation et validation francophone du Difficulties in Emotion Regulation Scale (DERS). In Société Québécoise de Recherche en Psychologie

Lakhan S. E., Schofield K. L. (2013). Mindfulness-based therapies in the treatment of somatization disorders: a systematic review and meta-analysis. PLoS ONE

Lathapipat, Dilaka (2011). "The inequality of access to education in Thailand, 1986–2009", paper presented at the conference ANU-DBU Economics of Education Policy: Access and Equity at Dhurakij Pundit University, Bangkok, Thailand, 14–16 June 2011.

Lutz A, Brefczynski-Lewis J, Johnstone T, Davidson RJ. (2008). Regulation of the neural circuitry of emotion by compassion meditation: effects of meditative expertise. PLoS ONE. 2008; 3:e1897. [PubMed: 18365029

Mayor JD, Salovey P. (1997). What is emotional intelligence?. In : Salovey P, Sluyter DJ, eds. Emotional Development and Emotional Intelligence. New York : Basic Books, 1997 : 3-31

Ministry of Public Health. (2016). Guideline on the Operation of Primary Care Cluster for Health Providers (in
Thai).Nondhaburi,MinistryofPublicHealth.2016.Sitevisited:<http://bps.moph.go.th/new_bps/sites/default/files/Guidelines%20PCC.pdf>Accessed on 11th October 2017

Ministry of Public Health, Thailand, (2007). International Health Policy Program (IHPP), Site visited: <<u>http://siteresources.worldbank.org/INTTHAILAND/Resources/333200-1089943634036/475256-</u>1151398858396/HHealthcare Financing in Thailand 2007 IHPP.ppt> Accessed on 5th October 2017

Ministry of Public Health Notification (2004). on "The Specification of the Premises for Health or for Beauty, Standards of the Premises, Services, Service Providers, Rules and Procedures of Inspection for Certification Based on the Standards of Premises for Health or for Beauty under the Service Establishment Act B.E. 1966", issued on 21 April 2004.

Ospina M. B., Bond K., Karkhaneh M., Tjosvold L., Vandermeer B., Liang Y., et al. (2007). Meditation practices for health: state of the research. Evid. Rep. Technol. Assess. 155, 1–263

Patlada Kongthong. (2016), 4,000 Thais take their own lives every year, Public Health Ministry says, February28,2016,TheSundayN,TheNationMultimedia,Sitevisited:<http://www.nationmultimedia.com/news/national/aec/30280354Accessed on 10th July 2017

Ramajitti (2007). Collaboration of Ramajitti Institute and Rajanukul, "IQ/EQ Watch on Thai Children Report," Department of Mental Health, Ministry of Public Health, Bangkok, 2007.

Saelee D, Tiptaengtae Sh, Tonsuthepweerawong C, Yana T, editors. Karn Kub Kluen Rabob SookkapabAmphur Chabub Prated (2014). Thai (The Movement of District Health System, Thailand version) (in Thai). 1st revised ed. Nondhaburi: Ministry of Public Health. 2014. P. 4.

The Shepell fgi Research Group. (2008). Employee health and well-being: Trends in the call centre sector. Site visited: <u>https://www.workplacestrategiesformentalhealth.com/pdf/Call_Centre_Workers_TrendsintheCallCentreSector_Resource.pdf</u> Accessed on: 14th December 2017

Slagter HA, Lutz A, Greischar LL, Francis AD, Nieuwenhuis S, Davis JM, Davidson RJ. (2007). Mental training affects distribution of limited brain resources. PLoS Biology. 2007; 5:1228–1235

Subcharoen P. (2003) Museum and Training Center of Thai Traditional Medicine (Bangkok: War Veterans Administration Printing, 2003), pp. 58-63.

Suppapitiporn S, Kanchanatawan B, Tangwongchai S. (2006). Emotional intelligence of the third year Chulalongkorn Medical students. Chula Med J 2006 Mar; 50(3): 165 – 73

Tejativaddhana, P., Briggs, D. & Tonglor, R. From global to local: Strengthening district health systems management as entry point to achieve health-related sustainable development goals, APJHM, Vol. 11, Iss. 3, 2016. pp. 81-86.

Today Online (2017). Thailand's national healthcare scheme hits financial trouble, Published: 5:15pm, May 12, 2017, Site visited: <<u>http://www.todayonline.com/world/asia/thailands-national-healthcare-scheme-hits-financial-trouble</u>> Accessed on 7th July 2017

Tsai, W.-C., Chen, C.-C., & Liu, H.-L. (2007). Test of a model linking employee positive moods and task performance. Journal of Applied Psychology, 92(6), 1570–1583.

Wongpiromsarn Y, Lotrakul P, Inseeyong V, Chaninyuthwong V, Suwanmaitree S, Wanitrommanee K, Sukmak K, Usaha S, Thongngen A. (2002). The development of the emotional intelligence screening test for the Thai population aged 12 to 60 years. J Psychiatr Assoc Thail 2002 Oct-Dec; 47(4) : 267-80

World Health Organization. (2017). World health statistics 2017: Monitoring health for the SDGs. Geneva, 2017. Site visited: http://www.who.int/gho/publications/world_health_statistics/2017/en/ - Accessed 15th September 2017.

Zeidan, F., Johnson, S. K., Diamond, B. J., David, Z., & Goolkasian. (2010). Mindfulness meditation improves cognition: Evidence of brief mental training. Consciousness and Cognition, 19(2), 597–605.

Zhang X (2002). WHO Traditional Medicine Strategy 2002–2005. Geneva: World Health Organization.

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