

## Research Article

# Exploring Quality of Hospital Administrations and Describing Level of Health Professionals Availability in Mental Specialized Hospital

Dessie Abebaw Angaw

Department of Epidemiology and Biostatistics, Institute of Public Health, College of Medicine and Health Science, University of Gondar, Ethiopia

### ABSTRACT

**Background:** Well organized departmental activities are essential to ensure effective and efficient hospital services that contribute to the health and wellbeing of the population served. The aim of this study was exploring quality of hospital administration and describing staff availability in mental specialized hospital.

**Methods:** Both quantitative and qualitative study design was applied among health professionals at mental specialized hospital in Ethiopia. All health professionals were followed for five days from August 10 to 14, 2017. Epi data 3.1 was used for data entry and Stats 12 was used for analysis. For In depth interview participants were selected purposively and thematic manual analysis was performed.

**Results:** A total of 167 health professionals were participated in this study. Excellent level of staff availability among health professionals working in mental specialized hospital was only 31%. About 40% of nurses

had excellent level staff availability while general practitioners and psychiatry specialists had (68.4% and 66.7%) poor staff availability respectively. Psychiatry specialists (66.7%) and health officers (62.5%) lost one complete day within the five days. on the top of this, 58.3% of psychiatry specialists lost at least 8 hours in the afternoon within five days.

**Conclusion:** In mental specialized hospital staff availability at working hours was low. In efficient staff motivation, stress full working environment and in adequate working environment supervision were important reasons for low staff availability.

**Keywords:** Staff availability, Health professionals, Mental specialized hospital.

**Abbreviations:** HO: Health Officer; GP: General Practitioner.

### Introduction

Enterococci Health as a fundamental right, is gaining popularity in the past few decades and it has become a social goal. This is essential for the satisfaction of basic human needs and to improve the productivity of the nations. But the expected standard of public health has not improved considerably in both the developed and developing countries [1,2].

Within many health care systems worldwide, increased attention is being focused on human resources management (HRM). Including accommodating employees with mental illness, improving managers competency and supporting organizational approaches to workplace psychological health and safety is the main issue of mental health organizations [3-6].

Human resource on mental health has a role include responding to employee situations involving psychosis, addiction, violence, bullying, harassment, suicide, discrimination and grief in the work place [7-9].

Well organized departmental activities are essential to ensure effective and efficient hospital services that contribute to the

health and well-being of the population served [1,10,11]. But in Ethiopia the public service industries work system do not well organized in which staffs , patients and customers satisfaction is low [12-15].

Amanuel mental specialized hospital is the center that gives mental health service with the highest number of highly qualified psychiatry health services personnel. With this, there are some problems of staff availability which lower the effective activities of the hospital to the public and still now there is no research or internal audit conducted in the hospital on level of staff availability which used for hospital as a base line and as a guidance of system adjustment

Therefore, this study was aimed to fill the gap by identifying the level of staff availability and describing factors that affect availability of health professionals within the working days in the hospital.

### Methods

Both descriptive and explorative study was conducted to assess the level of health professional availability in Amanuel mental specialized hospital from August 10- 14, 2017 for five

days follow up. This hospital is found in Addis Ababa which is the capital city of Ethiopia. It is the only biggest hospital that gives service for mental cases. The hospital gives service at least 111-800 cases per a year and it has 270 beds.

### Population, sampling procedures and data quality control issues

Those health professionals who were assigned in OPD and ward within the five working days in the study period were included in the study. Health professionals who were at annual and sick leave were excluded in the study. In Amanuel Mental Specialized Hospital there were 200 health professionals. The researcher decided to account all health professionals to be followed for five days.

Self-developed observational check list was used to collect information on socio demographic characteristics, and staff availability in the five working days. Four data collectors and two supervisors were assigned for data collection. Health professionals were followed for five consecutive working days, and they were visited at least six times per day. The data collectors visit one worker for every 30 m when she/he was absent during one visit until he was available in his working place. Observational checklists were evaluated by psychiatry specialist, management members and public health professionals.

There was half day training for data collectors on how to collect data. The collected data were checked every day by the principal investigator and supervisor for its completeness. After quantitative data was analyzed 10 in-depth were applied. In this interview psychiatry nurses, psychiatrists, team leader and department directors were purposively selected.

### Study variables and operational definition

In this study variable like level of staff availability, sex, profession, educational status and time were assessed. The variable time incorporates working days from Monday to Friday, morning and afternoon working hours, beginning and ending working hours. Excellent staff availability was considered when health professionals were available more than 90% the working hours per a week (lost hour = <4 h/weak), good (70-89%) and poor level of staff availability was considered when staffs available less than 70% of the working hours in the work place [1]. Beginning time was taken at 8:30 AM for morning and 1:30 PM for afternoon. Ending time was considered at 5:00 PM.

### Data management and analysis

After appropriate coding, the data was entered using Epi Info version 7 software and it was exported to STATA version 12 software for analysis. Descriptive statistics of the collected data was done for most variables in the study using statistical Frequency tables, percentages, means and standard deviations. In chi square test variables which have p value less than 0.05 at 95% level of confidence interval considered there is

significant association. For qualitative data thematic manual analysis were used.

### Ethical Consideration

Ethical clearance was obtained from the ethical committee of Amanuel mental specialized hospital. Since the study was follow up for assessing the level of staff availability at their working hours, staffs were not informed that they were under follow up. No written or verbal consent obtained from the participants due to the research nature. Because of the follow up was not disclose for the participants, work experience, age and other important variables were not assessed rather only sex, profession and educational status were assessed. The confidentiality of the data has been kept at all level of the study.

### Results

MIC's A total of 167 health professionals were participated in this study. Among the participant's nurses (87), Health Officers (8), psychiatry professionals (40), psychiatry specialists (12) and others (20) were involved. Four psychiatry nurses, two psychiatrists, two team leaders and two directors were involved for in depth interview (Table 1).

**Table 1:** Socio-demographic characteristics of health professionals in Emanuel mental specialized hospital (n=167), 2017.

Variable	Frequency	Percentage
<b>Sex</b>		
Male	90	53.9
Female	77	46.1
<b>Educational status</b>		
Diploma	89	53.3
Degree	44	26.3
Masters	13	7.8
Specialists	12	7.2
Others*	9	5.4
<b>Profession</b>		
Clinical nu/BSC nurse	87	52.4
Health Officer (HO)	8	4.8
Psychiatry professional	40	24.1
Psychiatry specialist	12	7.2
Others (GP and health assistant)	19	11.4

\* General practitioner and assistant nurse

### Level of staff availability

Excellent level of staff availability among health professionals working in mental specialized hospital was only 31% (Figure 1).



**Figure 1:** Level of staff availability among health professionals in mental specialized hospital, 2017.

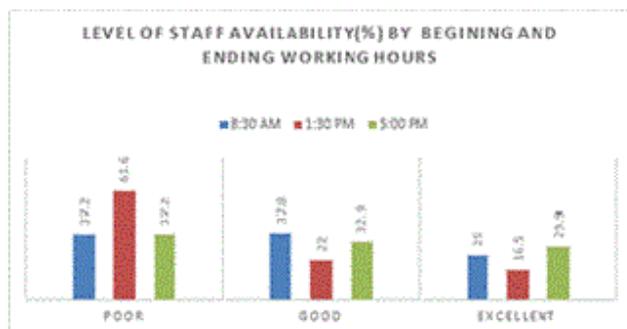
Nearly 40% Nurses had excellent level staff availability while 68.4% general practitioners and 66.7% psychiatry specialists had poor staff availability. On the other hand, 43.3% of diploma health professionals had excellent level of staff availability. Whereas, masters had only 7.7% excellent level of availability (Table 2).

**Table 2:** Level of staff availability by profession among health professionals working in Amanuel mental specialized hospital, 2017.

Profession	Poor (%)	Good (%)	Excellent (%)	Chi square test (p value)
<b>Clinical/BSC nurse</b>				
HO				
<b>Psychiatry professional</b>				
Psychiatry specialist				
<b>Others**</b>				
<b>Educational status</b>				
Diploma	23 (25.6)	28 (31.1)	38 (43.3)	
Degree	24 (54.5)	11 (25)	9 (20.5)	
Masters	6 (46.2)	6 (46.2)	1 (7.7)	
Specialist	8 (66.7)	1 (8.3)	3 (25)	
Others	5 (55.6)	2 (22.2)	2 (22.2)	2 (22.2)

\*\* General practitioner and health assistant

When we examine the level of staff availability on the beginning of working hours, 25% and 16.5% of health professional had excellent level of staff availability at 8:30 am and 1:30 pm hours respectively. On the other hand, health professional staffs had 29.9% of excellent level of staff availability at the end of working hours (5:00 pm) (Figure 2).



**Figure 2:** Level of staff availability by beginning and ending working hour among health professions at mental specialized hospital, 2017.

Majority of the health professionals arrive on time at 8:30 am and wait up to 5:00 pm in all working days. Whereas majority of health professionals do not start their work at 1:30 pm in all working days (Table 3).

**Table 3:** Frequency of health professionals by beginning and ending working hours in Amanuel mental specialized hospital, 2017.

Working days	Frequency					
	Beginning time morning 2:30 am (%)		Beginning time afternoon 1:30 pm (%)		5:00 pm (%)	
	No	Yes	No	Yes	No	Yes
Monday	42.7	57.3	62.2	37.8	37.2	62.8
Tuesday	40.2	40.2	64.6	35.4	44.5	55.5
Wednesday	40.2	59.8	54.9	45.1	43.9	56.1
Thursday	41.5	58.5	51.2	48.8	36	64
Friday	40.2	59.8	51.2	48.8	45.1	54.9

**Table 4:** Total lost times by profession among Amanuel hospital health professional, 2017.

Profession	Total lost time in working days (%)					
	At least one complete day within five days		At least 8 h within five days in the morning		At least 8 h within five days in the afternoon	
	No	Yes	No	Yes	No	Yes
Clinical/BS C nurse	60.5	39.5	77.9	22.1	70.9	29.1
HO	37.5	62.5	62.5	37.5	50	50
Psychiatry profession	62.5	37.5	67.5	32.5	60	40
Psychiatry specialist	33.3	66.7	66.7	33.3	41.7	58.3
Others**	55.6	44.4	42.1	57.9	42.1	57.9

Psychiatry specialists (66.7%) and health officers (62.5%) lost one complete day within the five days. On the top of this,

58.3% of psychiatry specialists lost at least 8 h only in the afternoon within five days (Table 4).

There was unequal distribution of appointment for morning and afternoon working hours. A three day randomly retrospective record review showed that 1218 patients were appointed for morning whereas only 383 patients were appointed within the three days (Table 5).

**Table 5:** Number of patients appointed for morning and afternoon working hours at Amanuel mental specialized hospital, 2017.

No	Month	Number of patients appointed		Ratio of morning to afternoon (for numbers 1-4)
		Morning	Afternoon	
1	September 11, 2016	464	180	464/180~2.5:1
2	October 15, 2016			290/103~3:1
3	October 16, 2016			464/100~4.6:1
4	Total			1218/383~3.2:1
	Morning ratio*			1218/12~102
	Afternoon ratio**			383/12~32

### Result from in-depth interview

TEM Most of the interviewee emphasized that the hospital senior management members, department directors, team leaders, health professionals commitment and the working environment by itself affects the quality of health care and level of staff availability at the working environment during working hours. They also agreed that senior management members have week relationship with health care workers. On the top of this, they spent their time on irrelevant issues and they don't have regular observation of the working environment to prioritize the problems and to understand the need of health professionals.

A 40 years old psychiatrist who was working 10 y at Amanuel mental specialized hospital explored as follow.

*"... An organization looks its leader; if an organization has strong leader there could be good quality of health care and motivated workers. But in our hospital the senior management members are not strong leaders. As a result of this, health professionals are not available in the working environment, there is scarcity of infrastructures, no refreshment for workers, and finally patients did not get quality treatment".*

Similarly, participants assured that there is poor staff availability in the mental health hospital. A 47 y old psychiatry nurse working 15 y in the hospital explained why there is low staff availability in the mental specialized hospital.

*"...working on mental specialized hospital is very stressful. But, no one understands this condition rather many people stigmatized us. The hospital has no any plan to refresh and*

*motivate the workers. Because of this, most of the workers available during the morning working hours. Psychiatrists did not available afternoon working hours, even for a week and a month they may absent because, they are busy for their own business".*

### Discussion

This study represents one of the first institution-based study to quantify hospital staff availability and to determine some factors that affect availability of staffs in the hospital at working hours. Our finding revealed that 40% health professionals were working less than 6 hours per day which was poor staff availability. Different findings also agreed that workers in mental health hospital has low availability during working hours [16-18]. The possible reason for majority of staffs availability fail under poor category could be low and inconsistency staff control system, less staff motivation and job dissatisfaction. This reason was supported by qualitative findings in which there was less staff motivation by the organization.

Based on our finding nurses were more available on their activities than prescribers (GP, masters and above). The possible reason for this could be very low control system for doctors and master prescribers, giving over all activities for residences and students. On the top of this, masters and specialists may be prioritized for their own work. This reason was supported by different studies in different regions [19-21]. Additionally, our qualitative findings strengthen this result, in which prescribers left the OPD for students and some psychiatry specialists left over the hospital more than a week for their personal benefit.

Our finding indicated that 61.6% health professionals were poor level availability at 1:30 PM on their working place where as, there were better staff availability (62.8%) at the end of or exiting working hours (5:00 AM).

The possible reason for this could be low staff awareness on beginning of working hours which was at 1:30 PM and majority of patient's appointment was in the morning. Additionally, it may be having poor staff motivation in training and income benefit. This reason was supported by observation and qualitative findings in which most of the staffs complete their lunch time at 2:00 PM, there was over crowding of patients at the morning than afternoon.

When we examine staff availability by beginning working hour in a day Monday was scored the least staff availability than other days. The possible reason could be mental readiness on for work on Monday next to weekend. Sufficient time for mental health patient's diagnosis is one of the mandatory steps to increase good patient diagnosis, patient prognosis and to reduce patient overcrowding and unwanted loss of money for patients. But our finding indicated that majority of General practitioners and prescribers lost at least one day at the morning and afternoon. Especially majority of health officers and psychiatry professions next to specialists lost one day working hours per a week afternoon. This indicated that majority of patient diagnosis or appointment

was at the morning. This indication was checked by appointment list proportion (appointment in the morning/afternoon) which was around three to one (3.2:1).

In this case one patient may get very few minutes other than the required time. This may have a negative consequence on patients result like misdiagnosis, unwanted medication or management, finally poor prognosis of the patient.

## Conclusion

According to Ethiopian hospital reform implementation guide line (EHRIG) excellent staff availability was found to be low in mental specialized hospital that can increase misdiagnosis of patients and poor relationship between patients and health care givers.

Nurse had better availability on their activity but psychiatry specialists and master psychiatry professionals had poor availability on their activities. Especially total lost time by psychiatry specialists and master psychiatry was high on the afternoon.

## Limitations

The possible limitation of this study was short day follow up that may reduce accuracy of staff availability. On the top of these, there was lack of similar findings on staff availability for comparisons for giving possible reasons and indication.

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## ADDRESS FOR CORRESPONDENCE:

Dessie Abebaw Angaw, Department of Epidemiology and Biostatistics, Institute of Public Health, College of Medicine and Health Science, University of Gondar, Ethiopia, Tel: +251912480696; E-mail: [dessieabebaw96@gmail.com](mailto:dessieabebaw96@gmail.com)

*Submitted: July 10, 2018; Accepted: November 15, 2018; Published: November 21, 2018*