ORIGINAL ARTICLE

Psychosocial Interventions for Mental Health Problems of In-patients in Non-psychiatry Units of Selected Tertiary Hospitals in the Philippines: A Mixed-Methods Approach

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ABSTRACT

Objectives. This study described the demographic and clinical profile, mental health problems, prevalence of psychiatric conditions, psychosocial interventions used, and outcomes of the management of mental health problems among in-patients admitted to non-psychiatry units of tertiary hospitals referred to mental health care providers; and described gender-disaggregated data related to mental health care providers and patients receiving psychosocial interventions in tertiary hospitals.

Methods. This study employed a mixed-method design, using both qualitative and quantitative methodologies following the convergence model of triangulation. The following were the data sources: (1) cross-sectional review of charts of patients referred for psychosocial problems using the ICD-10 classification; (2) a survey of mental health service providers; (3) key informant interviews of mental health service providers; and (4) focus group discussions of mental health providers. All data were collated, compared, and contrasted, then analyzed using the convergence model of triangulation design.

Results. Among the 3,502 patients in the chart review, 1,870 (53.40%) were males. The median age was 46.08 years and 92.06% were adults. The most common diagnosis among the patients were mood disorder (744, 21.25%) and organic mental disorder (710, 20.27%). Combination treatment of psychosocial intervention and pharmacology was the most common strategy received by patients. There was a higher proportion of patients admitted to public hospitals (996, 45.27%) who received psychosocial interventions only compared to those admitted to private hospitals (235, 18.05%). There were 3,453 out of 3,502 in-patients referred for psychiatric intervention. Of these 2,420 (70%) received

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psychoeducation, 2,365 (68.5%), received supportive psychotherapy/counseling, 535 (15.5%) family therapy, and 286 (8.3%) behavior modification. There were more patients given psychosocial interventions 2,541 (72.56%) who were discharged with instruction to follow-up, while around one in 10 (456, 13.02%) was not instructed to do a follow-up consultation. The types of interventions across all data sources were similar.

Conclusion. The most common type of management for psychosocial problems of in-patients in tertiary hospitals was a combination of psychosocial intervention and pharmacotherapy. Psychoeducation, supportive psychotherapy/ counseling, and family therapy were the most often given psychosocial interventions. The patient-related reasons for the choice of interventions were patient's medical status (diagnosis and severity of symptoms) and psychological status (psychological mindedness), while the provider-related factors influencing the choice of intervention were provider's skills and personal preference. Moreover, resources (human and material) and service provision policies (treatment guidelines and aftercare interventions) were the most common hospital-related factors. Further prospective research to determine the associated patients, providers, and hospital factors in larger geographic and cultural settings will provide evidence for the effectiveness and outcomes of psychosocial interventions.

Keywords: counseling, psychotherapy, family therapy, mental health, psychosocial

INTRODUCTION

The global disease burden of mental health conditions is estimated to be about 32.4% of years lived with disability (YLDs) and 13% of disability-adjusted life-years (DALYs),[1] with annual costs projected to reach US$6 trillion by 2030.[2] In the Philippines, anxiety and depression accounted for over 800,000 years of life lived with disability, and more people attempted suicide over the past decades, especially among the young.[3] Furthermore, mental health conditions cost the Philippine economy 68.9 billion pesos in 2019; annual costs included 2.7 billion pesos in health care expenditure and 66.2 billion pesos in lost productive capacities. While the need for mental health care has grown through the years, the human resources to address them have not yet been able to keep up.[4] According to Lally et al., there have only been three mental health care workers for every 100,000 Filipinos in 2017.[5] Fifty percent of psychiatrists in the Philippines are in private practice and for-profit mental health facilities, and mostly prescribe psychotropic medications to manage psychiatric conditions.[6]

Given its current mental health landscape and as mandated by the Mental Health Law, it is therefore imperative that mental health services be expanded and scaled up in the country. The Philippine Council for Mental Health has articulated the biopsychosocial-spiritual conceptual framework as its guiding principle and have called for interventions beyond psychopharmacology, including being responsive to the "psychosocial needs of the Filipino people" in developing and establishing a "comprehensive, integrated, effective, and efficient national mental health care system." Psychosocial interventions are treatments that "capitalize on psychological or social actions to produce change in psychological, social, biological, and/or functional outcomes."[7] These interventions can be psychoeducation, all kinds of individual, couple, and group psychotherapies, psychosocial rehabilitation, as well as supported employment and case management, among others.[7-9] Although there are varying degrees of evidence for the different interventions, international and local (Philippine Psychiatric Association) clinical practice guidelines have already included these as viable options in the management of patients.

While psychosocial support and treatment can be given in different milieus (i.e., community and humanitarian settings in the aftermath of a disaster), this study focuses on the tertiary hospital setting where most Filipino psychiatrists have some level of practice and interact regularly with other mental health care providers. This study hopes to add data on psychosocial interventions for in-patients, since "little is known about their use for patients with complex needs in the acute hospital care setting."[10] In a study by Du et al., it was noted that the use of psychosocial interventions increased over time by 4% per annum yet it was still not commonly adopted in many hospitals when treating patients with self-harm.[11]

The WHO (2020) Situational Assessment of the Philippines reports that psychosocial interventions are in fact being provided at public specialist mental health facilities in the country, which are mostly mental hospitals or general hospitals with psychiatric units and out-patient services.[12] The hypothesis of the authors, however, is that psychosocial interventions are being provided not just for patients admitted for primary psychiatric and neurologic causes but for other medical conditions as well. George Engel, the main proponent of the biopsychosocial framework had the primary intention of focusing on the "psychosocial aspects of managing illness within hospitals" when he was working with patients with myocardial infarctions. Engel's goals included prevention of worsening of illness, shortening hospital admissions, and reducing in-patient treatment costs not just through medications but through the activation of social supports and provision of social care.[13]

To the authors' knowledge, there had been no local in-depth investigation of psychosocial interventions in hospitals prior to this research. In this study the psychosocial interventions (PSI) refer to any intervention that targets psychological, behavioral or social factors rather than biological factors for improving psychological, behavioral,

emotional and medical symptoms, mental health functioning, and well-being of individuals. Moreover, the mental health service provider refers to an entity or individual providing mental health services, whether public or private, including but not limited to, mental health professionals and workers, social workers and counselors, peer counselors, informal community caregivers, mental health advocates and their organizations, personal ombudsmen, priests, persons or entities offering nonmedical alternative therapies. Most of the studies on psychosocial interventions were limited to the psychosocial aspects of disaster and psychiatric morbidity[14-16] and the effects of psychosocial interventions for mental health problems[17]. Being a preliminary investigation, this identified interventions used in tertiary hospitals to address mental health problems among in-patients admitted in non-psychiatry units referred to mental health service providers. This entailed describing the current realities of the implementation of the interventions in the specific context and population.

The specific objectives of the study were the following:

1. described the demographic and clinical profile of patients admitted in non-psychiatry units of selected tertiary hospitals referred to mental health care providers;
2. determined the most common mental health problems perceived by health professionals among patients who need psychosocial interventions;
3. determined the prevalence of psychiatric conditions among in-patients in non-psychiatry units of tertiary hospitals;
4. described the psychosocial interventions used by mental health care providers to treat referred in-patients in tertiary hospitals;
5. described outcomes (in-patient discharge status and length of hospital stay) of the management of mental health problems among in-patients admitted to non-psychiatry units of tertiary hospitals referred to mental health care providers;
6. described gender-disaggregated data related to mental health care providers and patients receiving psychosocial interventions in tertiary hospitals

Conceptual Framework

The Institute of Medicine incorporated three main concepts in its definition of psychosocial interventions: action; mediator; and outcomes.[7] Action is defined as "activities, techniques, or strategies that are delivered interpersonally or through the presentation of information." Mediators, on the other hand, are the "ways in which the action of psychosocial interventions leads to a specific outcome." Lastly, outcomes are desired changes in symptoms, functioning, and well-being. This study focused on the action component, even as there were some data that may point to the other two concepts.

There is a wide range of possible applications of psychosocial interventions but all are determined by three elements: the setting and format, the providers, and the population.

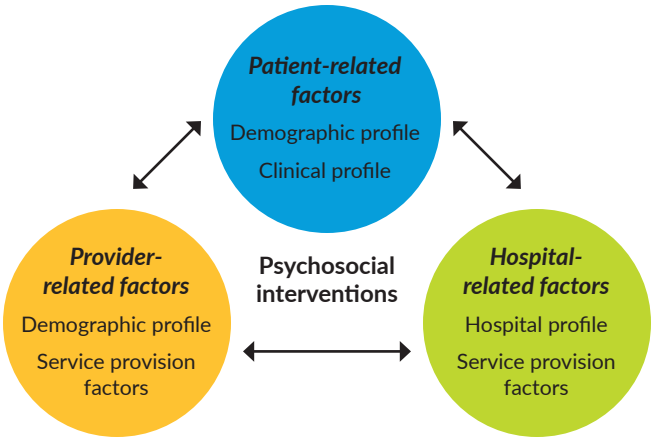

Figure 1. Conceptual framework for understanding the use of psychosocial interventions by mental health providers in tertiary hospitals for in-patients referred for psychosocial problems.

As a way to understand the various elements driving "action" or the use of the intervention, organizing and analyzing data from the lens of key stakeholders - patient, provider, hospital - were done, creating a conceptual framework as illustrated in Figure 1, a modified version of other conceptual frameworks from health system researches.[18-20]

Each stakeholder in the framework interacts with each other, influencing the context of the delivery of psychosocial interventions in the identified setting. Rather than visualized in "nestled levels,"[7] the different factors are presented as distinct but interdependent, as signified by the double headed arrows. The factors are generally categorized as general profile (patient and provider demographic profiles and hospital profile), patient's clinical profile, and service provision factors (provider-related and hospital-related). Patient-centered care is also implied by placing patient-related factors at the apex of the diagram. The scope of the study is limited to identifying psychosocial interventions being provided and describing factors in the immediate system or structure of the hospitals that influence its provision. So, a separate component for the bigger environment or system is not included anymore, although certain elements are subsumed under hospital-related factors.

Patient-related factors can be classified into demographic profile and clinical profile. Some patient populations because of age (e.g., very young children) and sex (e.g., pregnant women) cannot be given medications; hence psychosocial intervention is the only option for them and may indicate a more intensive kind and regimen. There are also sociodemographic patterns seen in the clinical presentation of certain mental health conditions. As for marital status, being married is generally considered a protective factor and may indicate greater social support. Additionally, patients' clinical profile (past medical history, family medical and psychiatric history, psychological reactions to illness, reason for referral,

symptom severity, kinds of treatment received) determines the kind of intervention they receive. Those with complex medical conditions may not be given medications and would primarily require psychosocial interventions. For those with severe mental health conditions, psychoeducation, supportive interventions, and engagement of family members or carers are preferred over more cognitive and expressive modalities. Psychosocial interventions were associated with patient characteristics such as increasing age and an increasing number of co-morbid mental disorders.[11]

Provider-related factors, on the other hand, are categorized into demographic profile and service provision factors. The provider's profession, gender, age, and years of practice are posited to also influence the delivery and outcome of services. A provider's profession, age, and years of practice may indicate more knowledge and skill in providing interventions. The gender of the provider may also influence the choice of intervention and the patient-provider fit. It has been noted that the demographic profile of both patients and providers and the interaction between them influence the kind and quality of services or interventions.[20,21] Relevant variables of both the client and therapist are age, marital status, training, language used, and parental status. Gender congruence in client-counselor matching seems more important though than other variables, particularly for female sexual abuse survivors who "may have difficulty discussing their trauma with male counselors."[22]

Service provision factors such as knowledge (e.g., formal training), skills (e.g., actual practice), and attitudes (i.e., preference for or bias against specific psychosocial interventions) drive the use of certain interventions. Among provider-related factors identified that can be barriers to implementation of psychosocial interventions are clinician time and individual attitudes toward the interventions.[23]

Lastly, hospital-related factors are divided into hospital profile and service provision factors. The profile of the hospital influences the kind of psychosocial interventions rendered. The type of hospital (public or private) and bed capacity give a glimpse to the resources the hospital has and the cost of its services. Staffing and availability of mental health providers limit the services the hospital can provide. Service provision factors pertaining to elements of the hospital system beyond the doctor-patient encounter (i.e., standards of care, cost of treatment, referral systems, and networking) impact the quality and extent of services rendered. Patel articulated that the shortage of trained mental health professionals, their high cost, and reliance on resource-intensive in-person training and expert supervision are among the greatest barriers to dissemination of evidence-based psychosocial interventions.[24] Rasheed et al. pointed to hospital leadership buy-in and support from the outset as keys to ensure engagement of physicians who may not be too keen on providing psychosocial interventions to their patients.[25] Other organizational concerns, such as the lack of space within the facility, should also be taken into consideration since they can all be barriers to the implementation of the intervention, especially in resource-limited settings.[23]

MATERIALS AND METHODS

Study Design

This study employed a mixed-methods design, using both qualitative and quantitative methodologies. Data were gathered concurrently from the following sources: (1) cross-sectional review of charts of patients diagnosed with mental health and behavioral disorders in selected tertiary hospitals in the Philippines; (2) a survey of mental health service providers; (3) key informant interviews (KII) of mental health service providers; and (4) focus group discussions (FGD) of mental health service providers.

The primary investigator initially submitted a letter to the participating hospitals requesting for approval to do chart reviews by the local investigators. Research assistants collected and encoded the demographic, clinical, comorbidities, family history, past medical history, psychosocial interventions, management, and diagnosis (ICD 10-CM F- codes for mental health disorders) using an electronic online Medical Records Google sheet. Patient charts were encoded from 25 March 2021 until 16 March 2022.

For the other methods, contact details of target respondents were obtained from the institutions' directory and invitations to participate in the study were then sent through email, Viber or SMS. Target survey participants were given the survey (either hardcopy or electronic form) and those who were not able to accomplish them yet after two weeks were given a reminder and an extension of another two weeks. Schedules for the KIIs and FGDs were set after confirmation to participate were obtained. Both the KIIs and FGDs used semi-structured questionnaires prepared for the study's purpose and were done online by the investigators in their respective institutions. KIIs took about 30-45 minutes each while FGDs lasted for about two hours each. All proceedings were recorded and transcription of data was done.

The study period chosen for the study was from 2014 to 2019 to avoid the confounding effect of the COVID-19 pandemic on data for the years 2020 and beyond. During the COVID-19 pandemic the number of inpatients decreased and length of hospital stay increased due to health protocols. Onsite face-to-face interactions also became limited and only essential procedures and interactions were maintained.

Setting

The study was done in seven selected tertiary hospitals, which were chosen based on representation, as well as accessibility and convenience. Five of the hospitals were located in Metro Manila - Cardinal Santos Medical Center (CSMC), Makati Medical Center (MMC), University of the East Ramon Magsaysay Memorial Medical Center (UERMMC), Philippine General Hospital (PGH), Veterans Memorial Medical Center (VMMC). There was one each

from the Visayas and Mindanao - West Visayas State University Medical Center (WVSUMC) in Iloilo City and Southern Philippines Medical Center (SPMC) in Davao City, respectively. Four hospitals were government-owned (PGH, VMMC, WVSUMC, and SPMC) and three were teaching hospitals (UERMMMC, PGH, WVSUMC).

Participants

For the review of records, included in the study were all charts of in-patients from 2014 to 2019 of the collaborating tertiary hospitals who were referred for a diagnosis of a mental health condition on admission or those who were referred for psychosocial interventions. Medical records without data on the diagnosis and treatment plans were excluded.

The survey respondents included all psychiatrists, psychologists, developmental pediatricians, residents in psychiatry, internal medicine and pediatrics, nurses, and religious personnel officially affiliated with the hospitals who have cared for patients referred for psychosocial problems during the study period. The reason for choosing Internal Medicine and Pediatrics residents is that they were one of the biggest numbers of residents in training and were accessible for the survey. Also, based on medical records, Internal Medicine and Pediatrics residents were involved in the referral, treatment, and management of patients in non-psychiatric training hospitals such as Cardinal Santos Medical Center.

The key informants were psychiatrists and psychologists and must be officially affiliated (visiting or active staff) with selected tertiary hospitals who had at least an admission or a referral during the same period, regardless of their current roles at the time of the study.

The FGD participants, on the other hand, were consultants or residents (of Psychiatry, Internal Medicine or Pediatrics), nurses, and religious personnel who cared for patients diagnosed with mental health and behavioral problems during the study period. The reason for choosing Internal Medicine and Pediatrics residents is that they were one of the biggest numbers of residents in training and were accessible for the Focus Group Discussion.

Excluded as participants were those who did not provide consent to participate.

Study Size and Sampling Strategy

For the chart review, the intended population was all the medical records of patients referred for psychosocial problems from 2014 to 2019. However, the target was not achieved due to personnel and logistical limitations brought about by COVID-19 and missing medical records.

For the survey, the computed sample size of healthcare providers was 385, which was based on the estimate of 55 health providers for each of the seven institutions. However, due to the limited actual number of mental health workers in the institutions and the fact that the majority of the nurses who provided mental health care already resigned, the number was not reached. There were low response rates for all the seven hospitals. Since, this is a baseline study, power calculation was not computed due to inadequate information of the exact population of the mental health workers in the hospitals from years 2014 to 2019.

For the KIIs and FGDs, it was determined by the study team that three key informants per institution will be interviewed and five to eight participants will be required for the FGDs in each institution.

A sampling strategy was not employed for the chart review and survey, as all available records and health care providers who attended to mental health problems were included. Key informants and FGD participants were identified from among the identified mental health care providers. Supposedly, key informants were chosen based on their position and role in the hospital but due to the unavailability of some of them, investigators resorted to convenience sampling. The fishbowl technique was initially intended to identify participants for the FGDs, however, institutions eventually resorted to convenience or purposive sampling due to schedule conflicts and technological limitations of some of the potential participants.

Data Analysis

Descriptive analysis was used to determine the profile of the participants. Continuous variables were described using mean, standard deviation, and median. The categorical variables were described using frequency and proportions. An independent t-test for continuous variables and a chi-square test for categorical variables were used to determine the significant difference between the two groups. A p-value of less than 0.05 is statistically significant. The SPSS version 20 and STATA 13 software were used in the analysis.

Qualitative data analysis of the KIIs and FGDs was performed using a manual approach and the results were validated by the authors. Content analysis was done on the printed transcripts of qualitative data. Individual factors were identified and were color-coded using highlighting and note-taking. Results were also tabulated electronically and reviewed. Qualitative data was organized into predetermined categories. Those that did not fit into any of the categories were put together and labeled as incidental findings. Common themes as well as divergent responses were identified.

Analysis of the data was done following the conceptual framework. All data were collated, compared and contrasted, then analyzed. Figure 2 shows the flow of data collection and analysis based on the convergence model of triangulation design.[26]

Ethical Considerations

This study was technically reviewed and approved by the funding institution, Department of Science and Technology - Philippine Council for Health Research and Development. It was also ethically reviewed and approved by the Department of Health - Single Joint Research Ethics Board, as well as the ethics review boards of the seven participating hospitals.

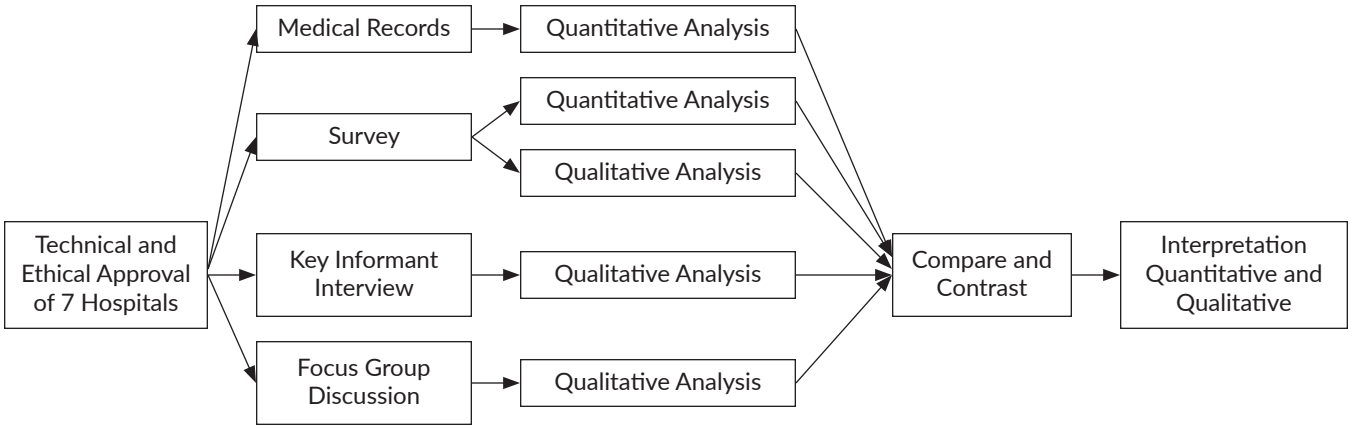

Figure 2. Data collection and analysis.

At no time during and after the study did researchers contact the patients. Hospital medical records gave consent for the chart review. The patients' information was de-identified by using number codes and only pertinent information needed for the study were obtained. Informed consent was obtained from all participants of the survey, KII, and FGD. Interviewees and discussants were given the option to opt out any time during the process. They were also given a simple honorarium as a token of appreciation.

Only the research team and statistician had access to the database. Data was stored in a password-protected laptop computer and will be kept for five years. After five years, data stored in the computer will be deleted and hard copies will be shredded.

Bias

Some medical records could not be retrieved due to unavailability (incomplete census and missing charts), and logistical limitations due to COVID-19 restrictions and hospital manpower limitations. These may have affected the results of this study since important data may have been missed, some subgroups of the population may have been underrepresented, and the risk for bias increased. However, efforts were made to include all patients' charts from the years 2014 to 2019 to minimize this.

Purposive or convenience sampling was used to identify participants for the FGD. Even for the KII, some interviewees were chosen based on convenience when the initial target participants were not available or did not give a response. Therefore, responses may not have been representative of the entire population or other important perspectives may have not been included in this study. Furthermore, a non-response bias may have also occurred for the survey, such that those who were only interested or had knowledge and good experience about the topic agreed to participate, positively skewing the results. To minimize this possibility, the entire population was included in the pool of invitees, an option for either a paper or online survey was given, and a period of one month, with a reminder after two weeks, was afforded the respondents, targeting as high enough response rate as possible.

In the qualitative methods, interviewer bias was addressed by having a semi-structured tool and uniform documentation process to aid the interviewer. Also, an orientation for all the interviewers was done prior to data collection. Information bias, however, could have occurred due to difficulties recalling experiences when respondents were asked to give information about matters that occurred years ago. Current experiences about the topic may have also skewed the responses. There were also several items in the interviews and discussions where respondents were asked to choose items from a list and rate them, which could have influenced or limited their responses. To mitigate these, the interviewers allowed participants to give additional answers and comments, and even ask questions for clarification.

RESULTS

Data gathered for this study came from a total of 3,502 unique hospital records, 417 survey forms of mental health care providers, 21 key informant interviews, and seven FGDs with 50 participants. Table 1 shows the number of in-patient medical records and survey respondents disaggregated by institution.

For the KII, a total of 21 informants, three mental health professionals who rendered psychosocial care from each institution, were interviewed. For the seven FGDs, a total of 50 mental health care providers participated.

Profile of In-patients Given Psychosocial Interventions

Among in-patients, there were 62.03% who belong to 20-59 years, 53.40% males, 45.43% were married or living together, 33.81% unemployed, and 56.58% are not formally enrolled in any health insurance (Table 2).

Almost nine in ten patients (2,987, 87.29%) referred for psychosocial problems had at least one medical comorbidity.

The most common were cardiovascular disorders (1,012, 29.57%), followed by respiratory disorders (617, 18.03%), endocrine disorder (586, 17.12%), infectious disease (523, 15.28%), musculoskeletal disorders (498, 14.55%), and central nervous system disorders (453, 13.24%).

Approximately one in ten patients (305, 8.71%) reported having a family history of mental health conditions, such as major depressive disorder, bipolar disorder, generalized anxiety disorder, schizophrenia, and alcohol use disorder, among others.

Reasons for Referral and Mental Health Conditions Diagnosed

Table 3 lists the top reasons for referral of in-patients to mental health providers based on chart review. The most common reasons for referral of in-patients to mental health providers were agitation (11.16%), depression (10.99%), and suicidal ideation (9.98%).

Due to sparse data from the records, reasons for referral were extracted from the survey, KIIs, and FGDs. Common themes on reasons for in-patient referral to psychiatry identified were: (1) harm to self; (2) harm to others; (3) non-compliance to treatment; (4) development or exacerbation of psychiatric symptoms; (5) evaluation for fitness to undergo procedures; and (6) palliative care.

Among the 3,502 patients from the chart review, 2,742 or 78.30% were diagnosed with at least one mental health condition after being seen by a mental health professional. Table 4 shows the distribution of the different ICD-10 diagnoses of the patients. The most common diagnoses of in-patients referred for psychosocial problems were mood disorders (21.25%) and organic mental disorders (20.27%).

Table 1. Distribution of medical records and survey respondents per institution

Hospitals	Number of medical records N=3,502 n (%)	Number of survey respondents N=417 n (%)
CSMC (Metro Manila, Private, Medium)	310 (8.9)	75 (18.0)
MMC (Metro Manila, Private, Large)	564 (16.1)	64 (15.3)
PGH (Metro Manila, Public, Very Large)	1,052 (30.0)	58 (13.9)
SPMC (Mindanao, Public, Very Large)	357 (10.2)	79 (18.9)
UERM (Metro Manila, Private, Medium)	428 (12.2)	57 (13.7)
VMMC (Metro Manila, Public, Large)	448 (12.8)	23 (5.5)
WVSUMC (Visayas, Public, Medium)	343 (9.8)	61 (14.6)

Table 2. Profile of patients who received psychosocial interventions

Profile	n (%)
Age group (N=3,463)	
19 years and below	332 (9.59)
20 to 59 years	2,148 (62.03)
60 years and above	983 (28.39)
Sex at birth (N=3,502)	
Male	1,870 (53.40)
Female	1,631 (46.57)
No data	1 (0.03)
Marital status (N=3,490)	
Married or living together	1,590 (45.43)
Single	1,556 (44.74)
Widowed	268 (7.66)
Separated	76 (2.17)
Employment status (N=1,813)	
Employed	534 (29.45)
Unemployed	613 (33.81)
Retired	437 (24.10)
Children	229 (12.63)
Health insurance coverage (N=3,097)	
Government insurance (PhilHealth)	1,157 (35.45)
Government and private insurance	144 (4.54)
Neither	1,796 (56.58)

Table 3. Most common mental health problems or reasons for referral of in-patients to mental health providers from chart review (N=3,502)

Reasons for referral of in-patients	n (%)
Agitation	391 (11.16)
Depression	385 (10.99)
Suicidal ideation	248 (9.98)
Anxiety	231 (6.59)
Aggression	65 (1.85)
Somatic	36 (1.03)

Table 4. Prevalence of psychiatric conditions among in-patients referred for psychosocial problems (N=3,502)

ICD-10 Diagnosis	n (%)
Mood disorders (F30-F39)	744 (21.25)
Organic mental disorders (F00-F09)	710 (20.27)
Neurotic, stress-related, and somatoform disorders (F40-F48)	573 (16.36)
Schizophrenia, schizotypal, and delusional disorders (F20-F29)	380 (10.85)
Mental disorder due to psychoactive substance use (F10-F19)	272 (7.77)
Behavioral syndromes associated with physiological disturbances and physical factors (F50-F59)	156 (4.45)
Mental retardation (F70-F79)	41 (1.17)
Unspecified mental disorder (F99)	29 (0.83)
Disorders of adult personality and behavior (F60-F69)	22 (0.63)
Disorders of psychological development (F80-F89)	21 (0.60)
Behavioral and emotional disorder with onset usually occurring in childhood and adolescence (F90-F98)	7 (0.20)

Psychosocial Interventions Rendered

From the medical records of in-patients with information regarding management of mental health problems (3,453 out of 3,502 patients), 88% (3,038) received psychosocial interventions. More than half (1,807, 52.33%) received it through combination treatment with pharmacotherapy, while a little more than a third (1,231, 35.65%) received it as a stand-alone strategy (Table 5).

Data from the other sources similarly identified combination treatment as the most common strategy although according to the KIIs and FGDs, psychiatrists differed in how they did it. Some psychiatrists gave both pharmacologic and psychosocial interventions at the same time, while others employed the interventions sequentially and in differing order of priority. All three psychologists from the KIIs stated that they do not give medications and only provide psychotherapy but two of them collaborate with psychiatrists, who manage medication treatment, employing the strategy called split treatment.

Psychoeducation (70.1%) and supportive psychotherapy or counseling (68.5%) were the top psychosocial interventions received by patients as seen in Table 6. It should be noted that numbers do not add to 100% since there were patients who received more than one intervention. There were also no interventions recorded for 475 patients (13.6%). Other interventions rendered for less than five patients were: anger management, end of life or palliative counseling, expressive psychotherapy, speech therapy, stress reduction technique, stress debriefing, expressive art technique, music therapy, family meeting, social intervention, therapeutic communication, and an unspecified individual psychotherapy.

KIIs and FGDs validated the results from the charts, with supportive psychotherapy or counseling and psychoeducation coming out as the most common kinds of psychosocial interventions rendered to patients. Apart from the ones already mentioned, there were other specific psychotherapies identified such as Interpersonal Psychotherapy (IPT), Art Therapy, and Eye Movement Desensitization and Reprocessing (EMDR). Generic responses were also given like individual psychotherapy, crisis management, and social intervention, as well as interview strategies such as therapeutic communication and motivational interviewing. Other approaches such as environmental manipulation and anthroposophical interventions were also mentioned.

Aside from individual-focused strategies, family and group interventions were also employed such as group therapy, group activities in the ward, and support groups. Family therapy was documented in patient charts and reported by mental health providers. A few informants, however, pointed out that family therapy is different from a family meeting or family psychoeducation.

Mental health providers through the survey, KIIs, and FGDs, validated that multiple interventions can be provided for a single patient. Key informant mentioned employing an "eclectic approach" to therapy - using elements of the different interventions to help a patient, rather than sticking to just one intervention. Patients were also referred to other health professionals (i.e., occupational and speech therapists), as well as spiritual or religious counselors to address psychosocial concerns.

Factors Influencing Choice of Interventions

KIIs and FGDs identified several factors that influenced the choice of intervention and were categorized into patient-related, provider-related, or hospital-related (Table 7). A common response by key informants and FGD participants was the need to customize care and tailor-fit interventions to the patients' needs given their particular realities and their changing circumstances.

Patient-related Factors

Most common patient-related reasons for the choice of interventions were patient's medical status (diagnosis and severity of symptoms), and psychological status (psychological mindedness or the capacity to reflect) and insight to condition (characterized by willingness to comply with treatment or resistance to be treated). Other factors identified by some respondents in both the KIIs and FGDs were the patient's age, gender, marital status, educational background,

Table 5. Intervention for in-patients referred for mental health problems based on chart review (N= 3,453)

Type of Intervention	n (%)
Combination treatment	1,807 (52.33)
Psychosocial interventions only	1,231 (35.65)
Pharmacotherapy only	289 (8.37)
No intervention	126 (3.65)

Note that values may not add up to 100% or total due to rounding.
**Forty-nine patients did not have information on the type of in-hospital management of psychosocial problems.*

Table 6. Psychosocial interventions provided to in-patients referred for mental health problems (N=3,453)

Type of Psychosocial Intervention	n (%)
Psychoeducation	2,420 (70.1)
Supportive psychotherapy / supportive counseling	2,365 (68.5)
Family therapy	535 (15.5)
Behavior modification	286 (8.3)
Relaxation	155 (4.5)
Cognitive behavioral therapy	69 (2.0)
Occupational therapy	67 (1.9)
Mindfulness	23 (0.7)
Cognitive stimulation	20 (0.6)
Spiritual counseling	5 (0.1)
Grief counseling	5 (0.1)
Others	21 (0.6)

Table 7. Common themes from KIIs and FGDs on factors influencing choice of interventions

Common themes	Sub-themes
Patient-related factors	
Medical status	Diagnosis
	Symptom severity
Psychological status	Psychological mindedness
	Insight to condition
Provider-related factors	
Skills	Profession
	Staff training
Personal preference	Confidence
	Willingness
Hospital related-factors	
Resources	Human resources
	Material resources
Service provision policies	Treatment guidelines
	Aftercare

economic status, length of hospital stay, family support, and nature of the psychosocial issue.

Some informants stated that once patients in other wards were referred to psychiatry, it usually meant that the patient's symptoms were already severe and often needed psychopharmacologic intervention. Medication management was mentioned as a top option to address severe mania, psychosis, sleep problems, delirium, agitation, severe anxiety, and difficulty concentrating. Some conditions, however, necessitated more family involvement and psychosocial interventions apart from medications, as recommended by treatment protocols, such as in delirium and cancers. For patients with adjustment disorders, especially those dealing with other medical conditions, and those with history of substance use disorders without active problems, stand-alone psychosocial intervention was the most common strategy.

Patient's perception of reality, presence of psychosis, and insight to the condition also influenced what and when psychosocial interventions were given. More supportive techniques and psychoeducation were initially given to those who were disoriented, psychotic, and in distress, and the talk therapies were reserved for those who became more stable, had the capacity to reflect, and willing to comply with treatment. There were cases when psychosocial interventions were given after the patient stabilized. A participant from FGD said that "psychosocial interventions help with compliance with medications" and "help patients adjust and integrate to society again." Participants from FGD emphasized that provision of combination treatment is consistent with the biopsychosocial-spiritual framework.

Provider-related Factors

Most common provider-related factors influencing the choice of intervention gathered from KIIs and FGDs were providers' skills and personal preference. Other less common provider-related factors identified were the provider's ability to build good therapeutic relationship and patient-therapist fit.

The skills of the provider were mostly influenced by their professional background and specific training received on psychosocial interventions. Psychologists by default provided psychotherapy, while psychiatrists usually provided combination treatment, since they can do both psychotherapy and medication management. The specific kind of psychosocial intervention, however, varied among the providers, which according to a KII participant was acceptable since what is more important is the therapeutic relationship more than the specific intervention and that in reality there is minimal therapist variability in conducting psychotherapeutic interventions.

A participant in FGD pointed out that even in a previous training about mental health conditions, they did not have input on psychosocial interventions. Those who did have some training, however, found them wanting. Some referring doctors from other specialties gave psychopharmacologic interventions themselves or gave psychosocial support first while waiting for the psychiatrist. However, those who provided psychosocial care were hesitant to label them as specific interventions given their lack of formal training. A participant in FGD said she had to pursue master's studies through her own initiative to be better equipped for her role. Common training needs identified were on communication, dealing with pain, employing a holistic approach, and handling specific mental health issues (i.e., agitation and suicidal thoughts). Even psychiatrists and psychologists had to undergo post-residency training on other evidence-based interventions relevant to in-patient care to gain competence in providing them, such as CBT, IPT, mindfulness-based therapies, and motivational interviewing.

Providers' preference was a common theme under this factor and had the sub-themes "confidence" in providing interventions and "willingness" to provide the intervention. Psychiatry consultants and psychologists generally felt comfortable and confident in providing psychosocial interventions because of their educational background and experience. However, other health care providers did not feel the same way. Several nurses said they were comfortable dealing with psychiatric patients but needed more skills enhancement to be more confident in providing psychosocial interventions. Non-psychiatry physicians, some nurses, social workers, and other allied health professionals expressed feeling scared, frustrated, awkward, and tentative in rendering services, even as most of them turned to intuition, compassion, and empathy to give psychosocial care. Even psychiatry residents expressed lack of confidence since they were still undergoing training.

A key informant emphasized the need to understand the complexity of a case in choosing the appropriate kind of psychosocial intervention to provide, as well as to recognize one's limitations and the need to refer to other more competent providers. Some informants mentioned that providers can also become more discerning in providing psychosocial interventions and can opt to not provide specific

interventions and collaborate with other health care providers (such as in split treatment). For example, some psychiatrists decide to give pharmacologic interventions only. Heavy workload was mentioned as a possible factor in the decision to not provide psychosocial interventions since they can be perceived as additional work, can be time-consuming, and can also take a toll on the provider.

Hospital-related Factors

Most common hospital-related factors, on the other hand, were resources (human and material) and service provision policies (treatment guidelines and aftercare interventions). Other factors mentioned were cost, system, and efficiency of services.

The availability of resources or lack thereof was identified to influence the kind of interventions given. According to informants, hospitals that had psychiatry services, especially those with consultation-liaison programs, were able to provide psychosocial interventions as part of their routine care unlike those without psychiatric ward or psychiatry residents. Programs and services, including hospital patient support groups, highly depended on human resources that were deemed generally lacking across all institutions. There were very few psychologists, nurse counselors, allied medical professionals (i.e., occupational therapists), social workers, religious counselors, and other mental health care providers available in the different institutions. The number of psychiatry residents and consultants varied but was still deemed generally lacking given the growing demand for their services in the hospitals. Some informants lamented that additional staff who could provide psychosocial services were limited by the number of job positions and items in hospitals, as well as hiring policies.

Material resources included provision of dedicated rooms and facilities for individual psychotherapy, family interventions, group dynamics and therapy, as well as behavioral interventions (i.e., for exercise and mindfulness activities). They also included the availability of information, education, and communication materials to aid interventions.

Under hospital policy, a sub-theme of "treatment guidelines" emerged and this included clinical practice guidelines mandated by hospitals for the treatment of certain conditions as well as hospital referral pathways to specific services. The Philippine Psychiatric Association's Consensus Treatment Guidelines and the World Health Organization service development guidance package were among the documents mentioned that provided guidance in the provision of psychosocial interventions. Some hospitals had their own written policies for specific conditions, for specific procedures, such as putting on restraints, and for certain groups, such as watchers. Policies were recognized to uphold legal and ethical principles in accordance with Philippine laws, such as the mental health law (RA 11036), the data privacy act (RA 10173), the law on anti-violence against women and their children (RA 9262), and law on protection against child abuse (RA 7610). Respondents also mentioned the existence of referral pathways, such as those for consultation-liaison psychiatry, child protection unit, women's desk, and social services. Having these in place augured well for the provision of in-hospital psychosocial interventions and inter professional collaboration.

"Aftercare" included policies on discharge and follow-up, and services to link or refer patients to local community resources. Informants reported that some interventions needed to be continued even after the patient has been discharged from the hospital. Hence the type of interventions chosen in the hospital needed to factor this in so that there can be continuity of care. Patients were linked to hospital out-patient services or programs. Alternatively, some were referred to other mental health care professionals or facilities in their locality because of expertise in specific psychosocial interventions, accessibility, cost, or a combination of the three.

Patient Outcomes

Patient outcomes based on patient records are tabulated in Table 8. Most patients were discharged and were given instructions to follow up (72.56%). Most common length of stay of patients were around two weeks to less than a month (40.80%) (Table 9).

From the survey, of the 147 health care providers who responded to the question on follow-up, 81 (55.1%) respondents reported that less than 25% of the referred in-

Table 8. Distribution of discharge status of in-patient mental health service provision (N=3,502)

Outcomes	n (%)
Discharged with instruction to follow-up	2,541 (72.56)
Discharged with no instruction to follow-up	456 (13.02)
Death (medical cause)	215 (6.14)
Referred to a mental health professional	17 (0.49)
Referred to a mental health facility	15 (0.43)
Referred to another tertiary hospital	11 (0.31)
Absconded	9 (0.26)
Others	238 (6.80)

Table 9. Distribution of length of hospital stay of patients, (N=3,483)

Length of Hospital Stay	n (%)*
Less than 1 week	1,039 (29.83)
1 week to less than 2 weeks	717 (20.59)
2 weeks to less than 1 month	1,421 (40.80)
1 month to less than 2 months	96 (2.76)
2 months to less than 6 months	184 (5.28)
6 months or longer	26 (0.75)

Note that values may not add up to 100% or total due to rounding.
**Nineteen patients did not have information on length of hospital stay.*

patients they saw returned to them for follow-up. Table 10 tabulates common reasons for failure of patients to follow-up as perceived by mental health care providers from the KIIs and FGDs.

Additionally, key informants identified factors perceived to be responsible for the improvement of the patients' condition (Table 11).

Gender Differences among Patients and Providers

Based on chart review, there were similar numbers of female and male patients who received the different kinds of interventions (Table 12). Most of these patients were attended to by a team of health care providers of mixed-gender composition (Table 13). Of the 2,358 patients, more than half received combination treatment.

There is no significant association between the patient's assigned sex and the gender composition of the mental health professionals who attended to them (X^2 = 6.1549, p value >0.05). In fact, similar proportions of female and male patients were attended by female-only mental health professionals (29.55% and 26.47%, respectively), and by male-only mental health professionals (2.15% and 2.62%, respectively). Around three quarters of female and male patients were attended by a mixed-gender composition of mental health professionals (67.08% and 70.00%, respectively).

Table 10. Perceived factors for failure of patients to follow-up according to KII and FGD

Common themes	Sub-themes
Patient-related factors	Financial constraints Logistics Poor family support Poor insight Resolution of problem Stigma Worsening of condition
Provider-related factors	Lack of emphasis on need for follow-up Poor therapeutic alliance Referred to other healthcare providers Scheduling issues
Hospital-related factors	Dissatisfaction with in-patient services Distance of patient's home from the hospital

Table 11. Key informants' perceived factors to patient improvement

Common themes	Sub-themes
Patient-related factors	Favorable diagnosis Financial resources Positive experience of therapy Positive psychological resources Psychological mindedness or insight Social support Therapeutic alliance Treatment adherence
Provider-related factors	Collaborative effort Close monitoring Medication management Non-pharmacologic interventions Referring doctor's perception of mental health Therapeutic fit Therapist's expertise
Hospital-related factors	Accessibility of services Supportive clinical milieu

Table 12. Types of intervention for in-patients referred for mental health problems, disaggregated by patient's assigned sex (N= 3,453: female – 1,608; male – 1,749)

Type of intervention as documented in the chart*	Both Sexes**, n (%)	Female, n (%)	Male, n (%)
Combination treatment	1,807 (52.33)	841 (52.30)	965 (52.33)
Psychosocial interventions only	1,231 (35.65)	562 (34.95)	669 (36.28)
Pharmacotherapy only	289 (8.37)	143 (8.89)	146 (7.92)
No intervention	126 (3.65)	62 (3.86)	64 (3.47)

Note that values may not add up to 100% or total due to rounding.
**Forty-nine patients did not have information on the type of in-hospital management of psychosocial problems.*
***One patient did not have a valid value for assigned sex.*

Table 13. Type of in-hospital management of psychosocial problem, disaggregated by health professionals' gender composition

Type of In-hospital Management of Psychosocial Problem*	Mixed Gender**, n (%)	Females Only, n (%)	Males Only, n (%)
All patients	2,358	974	84
Combination	1,311 (55.95)	449 (46.10)	47 (55.95)
Psychosocial interventions only	771 (32.70)	438 (44.97)	20 (23.81)
Pharmacotherapy only	222 (9.41)	49 (5.03)	9 (10.71)
None	54 (2.29)	38 (3.90)	8 (9.52)

Note that values may not add up to 100% or total due to rounding.
**Forty-nine patients did not have information on the type of in-hospital management of psychosocial problems.*
***Thirty-seven patients were attended by health professionals whose gender composition could not be determined.*

DISCUSSION

Demographic and Clinical Profile

In this study, the majority of in-patients were 20 to 59 years, males, married or living together, unemployed, and without health insurance coverage. This showed and agreed with the global disease burden of mental health conditions that lead to years lived with disability (YLDs).[1] The patients' age distribution, married status, and presence of other medical problems, particularly cardiovascular diseases, in this study mirror the patient profile in a meta-analysis by Smith et al. on the effects of psychosocial support interventions on survival in inpatient and outpatient healthcare setting.[27]

Reasons for Referral

The most common reasons for referral to a mental health professional were depression, anxiety, suicidal ideation, and agitation, which are similar to that of Vista et al.'s study.[28] Almost nine in 10 of the patients had at least one medical comorbidity, the most common of which was cardiovascular disorders.

Prevalence of Psychiatric Conditions

The most common discharge diagnosis of referred patients based on ICD 10 were Mood Disorder, Organic Mental Disorder, and Neurotic, Stress-related and Somatoform Disorder. In Vista et al.'s study, following DSM IV nomenclature, majority of the Axis I diagnoses were adjustment disorders, depressive disorders, and psychological reactions to illness, while, majority of the referrals were associated with poisoning and injury, neoplasms, endocrine, nutritional, metabolic, and immunity disorders.[28]

Psychosocial Interventions

Combination treatment with both pharmacotherapy and psychotherapy was the most common strategy in rendering psychiatric services. Key informants and FGD participants attributed this to its greater effectivity compared to single-modality interventions, although it was not adequately clarified whether this practice was based on provider's knowledge of evidence from literature or on empirical evidence and their expert opinion. While there is still a paucity of studies on combination treatment for other psychiatric conditions, there has been enough evidence for its utility on depression and anxiety, especially for severe cases.[27-30] Most internationally recognized treatment guidelines already include combination treatment either in a sequential pattern (as adjunct intervention) or right at the start of treatment.[27,30] In their studies, many psychiatrists preferred to do the latter. For those who employed sequential strategy, the kind of therapy that was first rendered varied; and the usual reason for the addition was the lack of initial treatment response. The authors did not systematically explore multiple psychosocial interventions given simultaneously although chart review showed patients receiving more than one intervention and some key informants mentioning employing eclectic approaches.

Some key informants and FGD participants, however, pointed out that patients being in an in-hospital setting and referred to psychiatry service may already suggest a higher level of patient distress and need for pharmacologic intervention. This is also congruent to the kind of psychosocial interventions that were most commonly rendered to the patients. Psychoeducation is generally considered to be a necessary component of any discussion with patients and their families about psychiatric or medical diagnosis and their treatment. It may also be a default and stand-alone strategy in itself. Supportive psychotherapy or counseling, on the other hand, are also usually rendered to those who may be in greater distress and not capable to undergo expressive and highly cognitive therapies.

Patient-related factors play a big role in determining the kind of intervention. In this study, patients were mostly married or living together and adults aged 20 to 59 years. Marital status profile of patients was similar to that of the study of Vista et al. but patient's age profile was not.[28] In this study, the median age of 46.08 years, 10% were in the pediatric age group (19 years and below) and close to 30% were in the geriatric population (60 years and above). The older age seen in patients given psychosocial interventions in this study may be a product of selection bias and does not totally rule out the necessity of psychosocial interventions for other populations groups in and out of the hospitals, who may have had milder symptoms and /or who were not referred.

While there were some differences between proportions of male and female patients receiving certain kinds of psychosocial interventions (i.e., family therapy, supportive psychotherapy, and behavioral modification), this study did not aim to make any inferences regarding the significance of patient's gender and the kind of intervention received. Comparison of interventions for the different age groups in the chart review was not done but key informants and FGD participants pointed out differences in psychosocial needs and effective approaches to treatment for the different populations.

According to the tiered intervention model for psychosocial interventions, acute care for this level would usually require patients to be attended to by a mental health specialist or team to address multiple, complex or severe problems.[33] In fact, the length of hospital stay for about 40% of patients in this study was two weeks to one month and more than a month for about 10% of patients. What was not documented though was the reason for the longer hospital stays, whether these were because of the medical condition, the psychosocial problem, or both. The authors were not able to look into the patient's awareness of and preference for the interventions given but surmised that consent was given for the formal therapies rendered.

The other main driver in providing psychosocial support in the hospital setting are the health care providers. In the

survey, they were identified as mostly middle-aged, female, and were either medical doctors (majority of which were psychiatrists) or nurses. There were very few psychologists in the hospitals and other medical professionals who were either not equipped or do not have the time and energy to do other tasks anymore. They had only 1-5 years in practice and had built competency either through seminars or post-graduate training. Respondents in the KII and FGD were more senior and were mostly psychiatrists, potentially influencing service provision. While most respondents recognized the need for the provision of psychosocial interventions, their familiarity with the different types was limited. Hence, the more common psychosocial interventions rendered in fact may be related to provider competence or expertise and personal preference.

While there was a difference in the frequency of use of family therapy between male and female providers, further study needs to validate this, since there was no difference seen in the general psychiatric interventions and other specific psychosocial interventions between the two groups. It is worth exploring whether the understanding of family therapy may have varied among the survey respondents, as there were no descriptions of the interventions in the survey. A few key informants averred that there could be confusion in the understanding of the intervention, such that a mere family meeting may already be assumed as family therapy when it should not be. In fact, a couple of FGD groups also had the dilemma of figuring out how to rank the intervention based on contrasting definitions.

Outcomes of Management

Most patients were discharged from the hospital with instructions for follow-up, especially those who were given combination treatment. This made sense since apart from symptom monitoring and medication management needed in pharmacotherapy, psychotherapies usually run for several weeks or months, even after patient has been discharged. Perceived factors by survey respondents that contributed to improvement were family support and doctor-patient relationship. These were especially relevant in hospital setting since in-patients face a lot of uncertainties brought about by their illness, and the possibility of death. When specialists were interviewed in the KIIs, top answers were family support and adherence to treatment. Perceived reasons for failure to follow-up, however, were financial considerations. These results were affirmed in the FGDs which found that financial considerations and denial or poor insight were top reasons for being lost to follow-up.

Gender-disaggregated Data Related to Mental Health Care Providers And Patients

There were also no noted differences in the gender composition of the mental health professionals and the patient's assigned sex. Providers in the public hospital usually cannot choose patients as they are assigned to them through a decking system as compared to private practice where referring physicians can choose to whom the patient will be referred. Patients, on the other hand, sometimes request for a provider of the same or different sex for whatever reason they may have, but subject to available human resources in the hospital. There may also be certain specializations that do not have gender balance yet and patient populations that are inherently skewed (i.e., obstetrics-gynecology). The significance of gender matching is worth exploring as to the extent of its effect on therapeutic alliance. This may also be related to the finding that an almost similar percentage of all female group providers preferred to use either combination therapy or psychosocial interventions only. This is in contrast with the all-male group of providers who prefer to use psychosocial interventions only as distant second to combination therapy, and about 10% of them did not even mention any intervention given.

KII respondents identified the patient's psychological and medical status as important reasons for choosing an intervention but were split in saying that age, sex, marital status, and even economic status determined the kind of intervention. These results reflected more the interviewed provider's knowledge, attitude, and behavior rather than actual patient-related factors influencing interventions. Further studies should be done on these factors. Apart from these, the kind of provider also determined the possible intervention, as psychologists, nurses and other allied health professionals cannot do pharmacotherapy. On the other hand, doctors who are non-psychiatrists have been able to prescribe medications, but most were not confident in providing psychosocial support. Psychiatrists therefore carried the heavier burden, being expected to do both. While psychiatrists were generally confident and comfortable in providing psychosocial interventions, ongoing training especially for the residents and young consultants were still emphasized. But even then, their number is limited hence training other hospital staff is imperative to address patients' psychosocial needs and improve outcomes.

Other hospital-related factors encourage and put parameters to the conduct of interventions. Differences in the psychiatric services and specific psychosocial interventions rendered in public and private hospitals were apparent, suggesting that the public hospitals in this study either had to cater to more severe cases necessitating intervention or that public hospitals had more established programs that allow them to provide services needed. It is noteworthy that one private hospital did not have a psychiatry department and that all public hospitals, were in fact regional centers, two of which were university hospitals. In one private hospital without a psychiatry department, resulting in a limited number of patients being managed by mental health experts such as psychiatrists and psychologists. In addition, some patients who require mental and psychosocial therapies have been transferred to other healthcare facilities for these services.

Most of the key informants lamented the fact that there were scarce hospital resources that limit psychosocial

interventions (i.e., facilities, number of staffs, presence of specialists and interdisciplinary team). While KII respondents expressing their preference where to admit patients may be a provider-related factor, it reflected important hospital qualities that influenced service provision. So, the quality and proximity of the hospital, competence and attitude of staff, as well as rates mattered.

In-patient psychosocial interventions were varied but were guided by hospital's adherence to national and international standards of care (i.e., consensus treatment guidelines of the Philippine Psychiatric Association). What can be allowed as hospital interventions? KII and FGD respondents suggested various modalities ranging from traditional psychotherapies to complementary strategies. A common theme that emerged is for hospitals to have more room for both old and new interventions that can be available for patients and is affordable. The challenge is to be able to institutionalize these evidence-based interventions for particular conditions or situations through capacity-building (i.e., training of nurses and other medical personnel), monitoring, and financing. Currently, there is limited insurance coverage for mental health services and do not necessarily indicate payment for specific psychosocial interventions rendered. In fact, while combination treatment is widely accepted as a good strategy, there are concerns to its cost-effectiveness. There has been very minimal data in this area, particularly in low-to-middle income countries, such as the Philippines.

A holistic and systems-based approach is necessary for the rolling out of these interventions. The ability of different stakeholders to pursue interprofessional collaboration can help align efforts and ensure better provision of psychosocial interventions for better outcomes. This is also true once patients are for discharge since this study suggests that psychosocial interventions ought to be continued after hospital discharge. Hence, hospital mechanisms for continuing care (follow-up and community/specialist referral) are crucial for the continuing treatment and prevention of relapse, such as in depression and suicidality.[34] Part of the output of this study is the creation of guidelines for the management of mental health problems among patients admitted to non-psychiatry in-patient units in tertiary hospitals referred for psychosocial problems as well as a list of community resources for aftercare in the community.

Limitations

Due to limitations in the access of the medical charts (e.g. hospital policies, logistical difficulties, and COVID-19 restrictions), the number of encoded records was an underestimation of the actual number of referrals for psychosocial interventions. The number of referrals themselves was just a small fraction of the total number of admissions, which may actually be a mismatch to the psychosocial needs of in-patients. However, percentages in institutions with available data were at par with the results of a systematic review of Dua and Grover in India in 2020 that showed a range of 0.01% to 3.6%.[35] Additionally, even as data from UP-PGH were incomplete, the percentage of minimum possible referrals was still higher than those from other institutions, as well as from a study in the same institution covering the years 1999 to 2008.[28] We could not ascertain from the data gathered though if this was because of patient-related factors (i.e., increased vulnerability of patient population), provider-related factors (i.e., recognition of symptoms), or hospital-related factors (i.e., increase in bed capacity or improvements of the consultation-liaison program).

CONCLUSION

Among patients with psychosocial problems, there was a higher proportion of 20 to 59 years, males, married, unemployed, and without health insurance. The top reasons for referral of in-patients were agitation, depression, and suicidal ideation. Combination treatment of psychosocial intervention and pharmacology was the most common strategy received by patients. There was a higher proportion of patients admitted to public hospitals who received psychosocial interventions only compared to those admitted to private hospitals. Psychoeducation, supportive psychotherapy/counseling, and family therapy were the most often given psychosocial interventions. Furthermore, there were no noted differences in the gender composition of the mental health professionals and the patient's assigned sex. Providers usually cannot choose patients as they are assigned to them through a decking system.

Recommendations

A prospective research to determine the associated patients, providers, and hospital factors in larger geographic and cultural settings will provide evidence for the effectiveness and outcomes of psychosocial interventions. Increasing awareness of and improving skills in psychosocial interventions may improve outcomes of psychiatric illness, decrease its stigma, and improve the quality of life of patients. Furthermore, the researchers recommended the formulation of psychosocial recommendations for referred in-patients and the compilation of a list of community resources that may be utilized for after-care by patients discharged from tertiary hospitals with continuing mental health problems.

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Statement of Authorship

All authors certified fulfillment of ICMJE authorship criteria.

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REFERENCES

1. Vigo D, Thornicroft G, Atun R. Estimating the true global burden of mental illness. Lancet Psychiatry. 2016 Feb;3(2):171-8. doi: 10.1016/S2215-0366(15)00505-2. PMID: 26851330.
2. Campion, J., Javed, A., Sartorius, N., & Marmot, M.. Addressing the public mental health challenge of COVID-19. The Lancet. [Internet]. 2020. [cited 2024 May]. Available from: https://www.thelancet.com/journals/lanplh/article/PIIS2215-0366(20)30240-6/fulltext
3. World Health Organization. Investing in mental health benefits people and the economy DOH, WHO, UNDP, and UN NCD Task Force share important findings from Investment Case Report on Mental Health in the Philippines. WHO IRIS. [Internet]. 2021 [cited 2024 May]. Available from: https://www.who.int/philippines/news/detail/22-11-2021-investing-in-mental-health-benefits-people-and-the-economy
4. World Health Organization. Assessment Instrument for Mental Health Systems Version 2.2. Switzerland. [Internet].2005 [cited 2024 May]. Available from: https://www.who.int/publications-detail-redirect/WHO-MSD-MER-05.02
5. Lally J, Tully J, Samaniego R. Mental health services in the Philippines. BJPsych Int. 2019 Aug;16(3):62-64. doi: 10.1192/bji.2018.34. PMID: 31385955; PMCID: PMC6646843.
6. The World Health Report. A Safer Future. Global Public Health Security in the 21st Century. WHO. Switzerland. [Internet]. 2007 [cited 2024 May]. Available from: https://www.who.int/publications-detail-redirect/9789241563444
7. Committee on Developing Evidence-Based Standards for Psychosocial Interventions for Mental Disorders; Board on Health Sciences Policy; Institute of Medicine. [Internet] 2015. [cited 2024 May]. Available from: https://nap.nationalacademies.org/initiative/committee-on-developing-evidence-based-standards-for-psychosocial-interventions-for-mental-disorders
8. Butler AS & Gonzalez ML Psychosocial interventions for mental and substance use disorders: A framework for establishing evidence-based standards. England MJ. National Academies Press Washington (DC). 2015.PMID: 26203478.
9. GBD 2015 Risk Factors Collaborators. Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. Lancet. 388(10053):1659-1724. 2015. doi: 10.1016/S0140-6736(16)31679-8. Erratum in: Lancet. 2017 Jan 7;389(10064): e1. PMID: 27733284; PMCID: PMC5388856.
10. Qin D, Du W, Sha S, Parkinson A, Glasgow N. Hospital psychosocial interventions for patients with brain functional impairment: A retrospective cohort study. Int J Ment Health Nurs. 2019 Oct;28(5):1152-1161. doi: 10.1111/inm.12627. Epub 2019 Jun 30. PMID: 31257721.
11. Du W, Luther M, Desborough J, Rogalewicz M, Glasgow N. Variation in and factors associated with psychosocial interventions for hospitalised self-harm patients in New South Wales, Australia. Gen Hosp Psychiatry. 2018 Sep-Oct;54:1-4. doi: 10.1016/j.genhosppsych.2018.06.003. Epub 2018 Jun 12. PMID: 29913345.
12. World Health Organization. Philippines WHO Special Initiative for Mental Health Situational Assessment. [Internet]. 2020. [cited 2022 June]. Available from: https://www.who.int/docs/default-source/mental-health/special-initiative/who-special-initiative-country-report---philippines---2020.pdf?sfvrsn=4b4ec2ee
13. The Biopsychosocial Model of Health and Disease: New Philosophical and Scientific Developments [Internet]. 2019 [cited 2024 May]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK552030/ doi: 10.1007/978-3-030-11899-0_1
14. World Health Organization. Scalable psychological interventions for people in communities affected by adversity: A new area of mental health and psychosocial work at WHO. Geneva. [Internet]. 2017 [cited 2024 May]. Available from: https://www.who.int/publications/i/item/WHO-MSD-MER-17.1
15. Ignacio L & Salazar G. Pagbangon: Sustaining the management of psychosocial problems among survivors of the disaster. World Association for Psychosocial Rehabilitation (Philippines) Proceedings. [Internet]. 2006 [cited 2024 May] Available from: https://www.herdin.ph/index.php?view=research&cid=1543
16. Concepcion RM. Psychoeducation for parents on the effects of disaster to children and adolescents. Philippine Journal of Psychiatry. 2011 July-December 33(2),15-19.
17. Moreno-Lacalle RC. The effect of psychoeducation for depression: A meta-analysis 2010-2016. Philippine Journal of Nursing. 2016 86(2): 36-43.
18. Ginty AT, Kraynak TE, Fisher JP, Gianaros PJ. Cardiovascular and autonomic reactivity to psychological stress: Neurophysiological substrates and links to cardiovascular disease. Auton Neurosci. 2017 Nov;207:2-9. doi: 10.1016/j.autneu.2017.03.003. Epub 2017 Mar 16. PMID: 28391987; PMCID: PMC5600671.
19. Kilbourne AM, Barbaresso MM, Lai Z, Nord KM, Bramlet M, Goodrich DE, et al. Improving Physical Health in Patients with Chronic Mental Disorders: Twelve-Month Results from a Randomized Controlled Collaborative Care Trial. J Clin Psychiatry. 2017 Jan;78(1):129-137. doi: 10.4088/JCP.15m10301. PMID: 27780336; PMCID: PMC5272777.
20. Mosadeghrad AM. Factors influencing healthcare service quality. Int J Health Policy Manag. 2014 Jul 26;3(2):77-89. doi: 10.15171/ijhpm.2014.65. PMID: 25114946; PMCID: PMC4122083.
21. King G. The Role of the Therapist in Therapeutic Change: How Knowledge From Mental Health Can Inform Pediatric Rehabilitation. Phys Occup Ther Pediatr. 2017 May;37(2):121-138. doi: 10.1080/01942638.2016.1185508. Epub 2016 Jul 6. PMID: 27384880.
22. Center for Substance Abuse Treatment (US). Trauma-Informed Care in Behavioral Health Services. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 2014. Report No.: (SMA) 14-4816. PMID: 24901203.
23. Bird VJ, Davis S, Jawed A, Qureshi O, Ramachandran P, Shahab A, et al. Implementing psychosocial interventions within low and middle-income countries to improve community-based care for people with psychosis-A situation analysis. Front Psychiatry. 2022 Aug 1;13:807259. doi: 10.3389/fpsyt.2022.807259. PMID: 35978847; PMCID: PMC9376469.
24. Patel VH. Global Mental Health. In: Witkowski T. Shaping Psychology: Perspectives on Legacy, Controversy and the Future of the Field. 2020. pp. 267-288.
25. Rasheed MA, Bharuchi V, Mughis W, Hussain A. Development and feasibility testing of a play-based psychosocial intervention for reduced patient stress in a pediatric care setting: experiences from Pakistan. Pilot Feasibility Stud. 2021 Mar 6;7(1):63. doi: 10.1186/s40814-021-00781-8. PMID: 33673877; PMCID: PMC7936486.
26. Creswell, J., & Plano Clark, V. Designing and Conducting Mixed Methods Research. 3rd ed. Singapore.SAGE Publications, Inc. 2018.

27. Smith TB, Workman C, Andrews C, Barton B, Cook M, Layton R, et al. Effects of psychosocial support interventions on survival in inpatient and outpatient healthcare settings: A meta-analysis of 106 randomized controlled trials. PLoS Med. 2021 May 18;18(5):e1003595. doi: 10.1371/journal.pmed.1003595. PMID: 34003832; PMCID: PMC8130925.
28. Vista SD, Castro CS, Trinidad-Fulgencio LM, Chua W.M. The utilization pattern of psychiatric consultation services at the University of the Philippines-Philippine General Hospital (UP-PGH) from 1999-2008. Acta Medica Philippina, 2010.44(3), 46-52.doi 10.47895/amp.v44i3.7750.
29. Kamenov K, Twomey C, Cabello M, Prina AM, Ayuso-Mateos JL. The efficacy of psychotherapy, pharmacotherapy and their combination on functioning and quality of life in depression: a meta-analysis. Psychol Med. 2017 Feb;47(3):414-425. doi: 10.1017/S0033291716002774. Epub 2016 Oct 26. PMID: 27780478; PMCID: PMC5244449.
30. Dunlop BW. Evidence-Based Applications of Combination Psychotherapy and Pharmacotherapy for Depression. Focus (Am Psychiatr Publ). 2016 Apr;14(2):156-173. doi: 10.1176/appi.focus.20150042. Epub 2016 Apr 7. PMID: 31975799; PMCID: PMC6519650.
31. Watanabe N, Churchill R, Furukawa TA. Combination of psychotherapy and benzodiazepines versus either therapy alone for panic disorder: a systematic review. BMC Psychiatry. 2007 May 14;7:18. doi: 10.1186/1471-244X-7-18. PMID: 17501985; PMCID: PMC1894782.
32. Bandelow B, Reitt M, Röver C, Michaelis S, Görlich Y, Wedekind D. Efficacy of treatments for anxiety disorders: a meta-analysis. Int Clin Psychopharmacol. 2015 Jul;30(4):183-92. doi: 10.1097/YIC.0000000000000078. PMID: 25932596.
33. Hutchison SD, Steginga SK, Dunn J. The tiered model of psychosocial intervention in cancer: a community based approach. Psychooncology. 2006 Jun;15(6):541-6. doi: 10.1002/pon.973. PMID: 16331595.
34. Devenish B, Berk L, Lewis AJ. The treatment of suicidality in adolescents by psychosocial interventions for depression: A systematic literature review. Aust N Z J Psychiatry. 2016 Aug;50(8):726-40. doi: 10.1177/0004867415627374. Epub 2016 Feb 19. PMID: 26896044.
35. Dua D, Grover S. Profile of Patients Seen in Consultation-Liaison Psychiatry in India: A Systematic Review. Indian J Psychol Med. 2020 Nov 9;42(6):503-512. doi: 10.1177/0253717620964970. PMID: 33354074; PMCID: PMC7735242.