

The Design and Outputs of the Pilot Implementation of the “Enhancing Skills in Screening and Assessment for Physicians and Rehabilitation Practitioners Level 2 Course”, Philippines, 2014

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ABSTRACT

Background and Objectives. The Philippine Department of Health (DOH) is mandated by law to, among others, develop capacities and accredit physicians and rehabilitation practitioners across the country on the assessment and management of drug dependence. This paper describes the design and presents the outputs of an advanced course on screening and assessment of drug dependence developed by DOH in partnership with the College of Public Health of the University of the Philippines Manila, Philippine College of Addiction Medicine, and the Group for Addiction Psychiatry of the Philippines.

Methodology. Review, abstraction and synthesis of data from training-related documents and records for the training activities implemented in 2014.

Results. The Level 2a course is a five-day program that focuses on enhancing the skills of physicians and rehabilitation practitioners on the screening and assessment of drug dependence using team-based and practical learning approaches, and builds on learnings from the basic accreditation course. A total of 36 participants from ten Drug Abuse Treatment and Rehabilitation Centers (DATRCs) in nine regions completed the pilot implementation of the course in 2014. In general, the overall participant feedback on the training was mainly favorable based on data from 47% of participants who agreed or strongly agreed to statements on the relevance and attainment of the course aims (mean rating of 1.10 ± 0.31 , 1 = Strongly agree, 5 = Strongly disagree), and the appropriateness of its content (1.24 ± 0.43) and design (1.18 ± 0.39). A paired-samples t-test comparing scores for 44% of participants showed that there was a highly statistically significant difference in the pre-test ($54\% \pm 13\%$) and post-test scores ($69\% \pm 10\%$); $t(16) = 6.4240$, $p < 0.0001$.

Conclusion. Development and design of capability-building initiatives in the field of drug rehabilitation will necessitate alignment with practice standards, grounding in the real-world setting in which professionals work, and orientation towards practical learning.

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INTRODUCTION

Drug use disorders have gained prominence in the Philippine criminal justice, public health, and social landscape following the “war on drugs” initiated by the current dispensation since 2016.¹ The intensified nationwide campaign against illegal drugs resulted to a high influx of persons who use drugs (locally referred to as “drug surrenderers”) held in, among others, prisons and Drug Abuse Treatment and Rehabilitation Centers (DATRC). This is reflected in the notable increase in the estimated prevalent cases of drug use disorders from 435,267 (Uncertainty Interval [UI] 368,064 – 516,264) in 1990 to 693,549 (UI: 588,346 – 821,087) in 2017, although the condition’s contribution to the overall burden of disease in the Philippines has remained low (i.e., less than 1% of the total disability-adjusted life years for the country in 2017).²

The response to this issue is primarily guided by Republic Act No. 9165 (Comprehensive Dangerous Drugs Act of 2002), which, among others, mandates the Philippine Department of Health (DOH), through the Dangerous Drugs Abuse Prevention and Treatment Program (DDAPTP), to exercise oversight and monitoring of the integration, coordination and supervision of all drug rehabilitation, intervention, aftercare, and follow-up programs, projects, and activities.³⁻⁵ This includes the development of capacities, and consequent accreditation, of physicians and rehabilitation practitioners (the collective term for nurses, psychologists, social workers, and other individuals involved in the care of drug dependents) across the country on the assessment and management of drug dependence.

Since 2009, a collaboration between the DDAPTP-DOH, College of Public Health of the University of the Philippines Manila (CPH-UPM), Philippine College of Addiction Medicine (PCAM), and the Group for Addiction Psychiatry of the Philippines (GAPP) has resulted to the development of two basic training courses – one for physicians and another for rehabilitation practitioners – and the training and accreditation of around 500 professionals working in DATRCs, hospitals, health centers, and other facilities across the Philippines.⁶⁻⁸

In 2013, the four collaborating organizations embarked on the conceptualization of advanced and specialized training courses that aimed to expand the coverage of the existing basic training courses – which we described in detail elsewhere^{7,8} – after careful consideration of feedback received by the DOH from practitioners in the field. Among others, the plan was to deploy advanced courses in screening and assessment (Level 2a) as well as treatment planning and management (Level 2b); a refresher course for physicians accredited by the Dangerous Drugs Board (DDB) under the prior dangerous drugs statute; and an executive course for heads of drug rehabilitation facilities, and decision-makers and policymakers involved in drug rehabilitation.

This paper describes the design and presents the outputs of the Level 2a course implemented in 2014 (the only advanced course implemented to date since the policy direction of DOH in 2016 focused on accrediting more physicians and rehabilitation practitioners under the basic training course), with the end in view of contributing to the published literature⁷⁻¹⁹ on drug rehabilitation training. It is also our purpose to document the efforts of the DOH, together with CPH-UPM, PCAM, and GAPP, in addressing the country’s drug problem through the development and implementation of a local capability-building initiative.

METHODS

Data for this paper were abstracted from archival records on the training activity lodged with the University of the Philippines College of Public Health Foundation, Inc., which managed the implementation of the course. These included minutes of meetings, memoranda, training reports, training manuals, and course feedback forms. Data collection and review took place from June to July 2018.

Analysis was done at two levels. First, we synthesized information on the training design – including content, teaching-learning strategy, and method of learner evaluation – and the process of module development and course enhancement. Second, absolute and relative frequencies were used to report the number and characteristics (i.e., sex, professional category, area of assignment) of participants who completed the training. Descriptive statistics (i.e., mean, standard deviation, range), on the other hand, were calculated to summarize the results of pre- and post-test, and ratings in the oral case presentation and written case report, while narrative feedback provided by participants were summarized based on content. These data correspond to the first two levels (Reaction and Learning) of Kirkpatrick’s framework for training evaluation.²⁰ In addition, we performed a paired-samples t-test comparing test scores before and immediately after the training activity to measure changes in learning within the short-term (i.e., before and immediately after the training activity).

Validation of findings was conducted through triangulation of data by source, and an iterative process of discussion among the senior members of the author group, who were also part of the training team.

RESULTS

Training Design, Module Development, and Course Enhancement

The Level 2a course focused on enhancing the skills of physicians and rehabilitation practitioners on the screening and assessment of drug dependence. Specifically, the course aimed at allowing participants to (a) apply theoretical learning from the basic course on the use of screening tools, diagnostic interviewing skills, and application of diagnostic

criteria; (b) distinguish the role of psychological tests; (c) explain the different biological markers and ancillary tests; (f) utilize the different tools in assessing a client; (g) discuss Patient Placement Criteria (PPC) or treatment matching; and (h) present the Integrated Drug Dependency Examination report.

Participants in this advanced course must have completed the basic course and must be accredited by the DOH prior to the training. In contrast to the basic course where the trainings are separate for each cadre (i.e., one course for physicians, and a separate course for rehabilitation practitioners), the advanced course used the team approach, where each facility has to nominate and send at least one representative for each professional category (e.g. physician, nurse, social worker, psychologist). This is to develop the participants' collaborative-integrative method of management for clients when they return to their respective facilities.

The training was implemented over a five-day in-class period, which was to be followed by six months post-training practicum and onsite mentoring by course instructors in the participants' own workplace.

To address the learning outcomes, the course used a combination of didactics, practicum, and integration as teaching-learning approaches. Table 1 shows the training design and content of the advanced course as well as the number of hours allotted per approach for each batch (Batch 1 and 2).

The didactics (lecture) part of the training, which covered Days 1-2 of the schedule, included the orientation to the Level 2A course, review of topics from the basic course and

discussion of additional topics on screening and assessment. A video demonstration of screening by each DATRC was also included in the didactics.

The practicum aimed to improve skills and attitudes of the participants through application of knowledge learned during the didactics portion of the training. It was further divided into (1) immersion and (2) workplace (or point-of-care) practicum. The immersion practicum was conducted on Days 2-3 in a DATRC pre-selected by the training organizing committee, while the workplace practicum was supposed to be done within six months after training in the participants' respective facilities.

The integration portion of the training covered Days 3-5 and was focused on incorporating the knowledge, skills, and attitudes learned during the didactics and practicum. It also included mentoring participants for the written report (case study) and case presentation to panel members who were pre-selected by the training organizing committee. The oral case presentation was the final output of the participants per respective DATRC.

A workbook orientation was also provided for the participants during the last day of the training (Day 5). The set of workbooks, which summarizes data on patients assessed and managed by trainees, were to be used during the post-training workplace practicum and mentoring.

As shown in Table 1, there were modifications on the content and numbers of hours allotted for didactics for Batch 2, based on the feedback received for the first training. All review lectures were consolidated on Day 1, with reduction of time allotted for topics from 60 to 45 minutes. One topic

Table 1. Design of the "Enhancing Skills in Screening and Assessment for Physicians and Rehabilitation Practitioners Level 2 Course", Philippines, 2014

Activity	Content	Time Allotted			
		Batch 1		Batch 2	
		Schedule	No. of hours	Schedule	No. of hours
Preliminaries	<ul style="list-style-type: none"> ● Orientation ● Pre-test 	Day 1	2	Day 1	2
Didactics	<ul style="list-style-type: none"> ● Basic framework of comprehensive treatment for drug dependence ● Review of screening and assessment in the context of 12 Core Functions ● Review of basic concepts of addiction management (Batch 1) / Screening Interview (Motivational Interviewing) (Batch 2) ● Components of Mental Status Examination (MSE) ● Review of diagnostic criteria ● Use of psychiatric tools ● Review of screening and assessment tools ● Video presentation on screening conducted by participating DATRCs 	Day 1-2	16	Day 1-2	12
Practicum	<ul style="list-style-type: none"> ● Immersion in selected DATRCs 	Day 3	8	Day 2-3	8
Integration	<ul style="list-style-type: none"> ● Mentoring 	Day 4	4	Day 3-4	8
	<ul style="list-style-type: none"> ● Report writing (case study) ● Oral case presentation 	Day 4	4	Day 4	4
Closing	<ul style="list-style-type: none"> ● Post-test 	Day 5	6	Day 5	6
	<ul style="list-style-type: none"> ● Course evaluation 	Day 5	-	Day 5	-
Total			40		40

was shortened as it was deemed too broad (from discussion of addiction management to screening only). In addition, the video demonstration of screening in Batch 1 was modified to video presentations of participants in Batch 2. Participants were requested to do a video recording of how they conduct screening in their respective facilities, and these were to be presented to panel members for comments. Overall, the total time allocation for didactics was reduced from 16 to 12 hours.

Corresponding changes on the schedule were made for the practicum and mentoring. While the number of hours allotted for the practicum remained the same, the schedule was moved for Batch 2 (from Day 3 only to Days 2-3). This was because the participants and preceptors noted that a whole day interview and examination made clients irritable and impatient. The interview was then scheduled for two consecutive half days to, first, allow the clients to have a period of rest, and, second, provide the team with an opportunity to consolidate their initial findings and ask additional questions missed during the first day of interview. An additional four hours was allotted for mentoring for Batch 2, and a corresponding adjustment in schedule for this activity was also observed (i.e., from Day 4 to Days 3-4). This adjustment in schedule was also done to provide ample time for panel members to review the participants' written report prior to their case presentations on Day 5.

Assessment of participant learning took several forms. A 50-item multiple choice best answer format examination – with questions prepared by the different resource speakers for each topic/module – was administered prior to the start of, and immediately after, the training session. No specific passing grade was set, as the interest was to measure the change in participant's knowledge before and after attending the course.

During the practicum, field preceptors were provided with an observation checklist to rate trainee performance of the 15-step procedure for screening and assessment using a five-point scale (0 = not performed at all; 4 = performed with exceptional level of competence). Feedback on participant performance was provided on-site or during the mentoring session on Day 4.

Oral case presentation, allocated to individual (40%) and group (60%) performance, was evaluated using parameters focused on the content (30%) and manner (70%) of presentation. Written case reports were assessed for completeness and accuracy on the 14 parts of case assessment (i.e., demographics; personal, social and family history; physical, neurological, and mental status examination; result of screening tool administration; diagnosis and basis). Both evaluation systems used a weighted scoring system (total of 100%), and scores for individuals and groups were averaged from those provided by assessors. A passing mark of 75% overall rating was discussed, but not formally adopted, by the training team after the two rounds of implementation as it was not decided how to weight each of the assessment

components, and whether the skills observation during the practicum will be for formative or summative evaluation.

In addition, trainee feedback on the course design and content, as well as the administrative aspects of the course, was collected at the end of the training using a standard tool to ascertain areas of strengths and improvement for the training design. Responses to 16 items were collected using a Likert scale (1 = Strongly agree; 5 = Strongly disagree), while free text responses from participants were collected for five open-ended questions (e.g., *What aspects of the course were most helpful/least helpful?*)

Course outputs

Only two batches of the Level 2a training course were conducted in 2014. To date, no other advanced courses have been offered as the DOH prioritized in 2016 the conduct of the basic training course to meet the surge in demand for drug dependency assessment and management.

A total of 36 participants from ten DATRCs in nine regions completed the Screening and Assessment course (Level 2a) in 2014 (Table 2). There were 16 participants for Batch 1 (October 6-10, 2014) and 20 participants for Batch 2 (November 24-28, 2014). Majority (58%) of the participants were female. While a balanced composition of participant teams was envisioned for the course, nurses (n = 6) were only included as training participants for Batch 2 following feedback from the first training round that their participation is necessary to achieve a more holistic approach to client care. Overall, Luzon had the highest number of trained DATRC personnel while Mindanao had the lowest number of trained staff. Specifically, Region V (Bicol) had the highest number of trained DATRC personnel (eight), which included the facilities based in Camarines Sur and Albay.

In general, the overall participant feedback on the training was mainly favorable based on data from 17 participant feedback forms (47% of the total participants) that were retrieved for this report. Mean rating for relevance and attainment of objectives (1.10 ± 0.31), congruence between course aim and content (1.24 ± 0.43), appropriateness of teaching-learning strategies used (1.18 ± 0.39), and feedback on the administrative aspects of the course (e.g., food and accommodation, venue) (1.85 ± 0.76) all fell between ratings corresponding to "strongly agree" and "agree". These numerical ratings were consistent with narrative feedback from participants. For example, the practicum aspect of the course where participants screened and assessed a real patient was consistently pointed out as being an enabler, allowing participants to transition from theory to practice. The one-day mentoring session, on the other hand, was an opportunity to discuss and reflect on the field experience, while the oral case presentation helped to hone critical thinking by way of the challenging questions provided by the mentors/panel members. It was also noted that the advanced course especially helped further clarify concepts and tools introduced during the basic course.

Table 2. Distribution of training participants, per region/facility and per cadre, for the “Enhancing Skills in Screening and Assessment for Physicians and Rehabilitation Practitioners Level 2 Course”, Philippines, 2014 (N = 36)

Region	Facility	Cadre				Total
		Physician	Nurse	Psychologist	Social Worker	
Batch 1						
I	DOH DATRC Dagupan	1	-	1	1	3
III	DOH DATRC Bataan	1	-	1	1	3
NCR	DOH DATRC Bicutan	1	-	2	1	4
IV-A	DOH DATRC Tagaytay	1	-	1	1	3
V	DOH DATRC Camarines Sur	1	-	1	1	3
					Total for batch	16
					% of all participants	44%
Batch 2						
V	DOH DATRC Albay	1	2	1	1	5
VI	DOH DATRC Iloilo	1	1	1	1	4
VII	DOH DATRC Cebu	1	1	1	1	4
VIII	DOH DATRC Leyte	1	1	1	1	4
X	DOH DATRC Cagayan de Oro	-	1	1	1	3
					Total for batch	20
					% of all participants	56%
Total per cadre		9	6	11	10	
% of all participants		25%	17%	31%	28%	

A paired-samples t-test to compare test scores before and immediately after the training activity for 16 participants (44% of all participants) for whom examination results were available to measure short-term learning showed that there was a highly statistically significant difference in the pre-test ($54\% \pm 13\%$) and post-test scores ($69\% \pm 10\%$); $t(16) = 6.4240$, $p < 0.0001$. On the other hand, the mean rating for oral case presentation was 79.12% (standard deviation: 7.55; range: 61.50–91.33), while that for the written case report was 80.32% (standard deviation: 4.33; range: 72.50–87.67) based on data retrieved for all 36 participants.

DISCUSSION

This paper described the design and outputs of the pilot implementation in 2014 of the advanced course on screening and assessment of drug dependence, a five-day program designed by a government-academe-civil society collaboration to build capacities of physicians and rehabilitation practitioners in the country. A total of 36 participants from DATRCs in nine regions of the country completed the course. Average participant score on a knowledge-based test increased by 30 percentage points after the training, while skills, as assessed from the case presentation, were generally satisfactory (i.e., mean rating above 70%). Overall, training attendees rated the program favorably in terms of the relevance and attainment of its aim, and the appropriateness of the content and design.

The training program presented in this paper was designed in response to feedback received by the DOH from practitioners in the field, many of whom were generalists

working in the drug addiction field. This social relevance and groundedness in the local context, however, is but one of the course's advantages and unique features.

Another distinct aspect of the program that may serve as a model for other institutions and countries is its use of a team approach to learning. Of note, only Norway was noted in our review of the literature to have utilized a multidisciplinary approach to training in the field of substance use disorder (as a co-occurring disorder among individuals with severe mental illness)^{21,22}, as all other training programs were conducted for each professional group separately.⁹⁻¹⁹ While it can be argued that different professionals have varying job descriptions and, hence, will require development of diverse set of competencies, a counterclaim can be made that, at least within the ambit of drug rehabilitation, the focus of service provision by physicians and rehabilitation practitioners is the same individual. Thus, interdisciplinary collaboration becomes imperative to ensure convergence and synergy of efforts to attain a common treatment outcome. This tactic was found to be favored by professionals as it allows for shared learning and understanding²³, and is deemed to be appropriate in addressing the complexity of substance abuse and/or the needs of clients.^{24,25} Aside from a theoretical and empirical underpinning, a multidisciplinary approach to treatment has also been identified by the United Nations Office on Drugs and Crime (UNODC) and the World Health Organization (WHO) as an important component of a comprehensive treatment system²⁶, and is a key principle of the national-level policy on drug rehabilitation.²⁷ Given the limitations of the review done for this paper, however, it may be worthwhile to pursue a more formal assessment

on the effectiveness of a team approach to training in drug rehabilitation in the Philippine setting.

From a pragmatic perspective, it is important to note that the initial intent of the team in designing the course was to implement the in-class phase of the training over a short period of five days, and to complement this with a post-training practicum and onsite mentoring over a six-month period. The purpose of this design was three-fold. First, it would prevent disruption of delivery of drug rehabilitation services in DATRCs as concerned staff will only be away for a limited number of days (in contrast, the basic course took place over two weeks^{7,8}). Second, the six-month mentoring and extended practicum would have allowed the training team to measure change in participant knowledge and skills beyond the short-term and outside the classroom setting (i.e., Level 3 in Kirkpatrick's model of learning evaluation²⁰). Third, participants would be given an opportunity to learn in a real-world setting and from real-world cases present in their practice. While training participants were able to complete the workbooks assigned for this part of the course, administrative and feasibility constraints on the part of the DOH precluded implementation of field visits by the identified mentors. This is an avenue for further research and evaluation.

As was mentioned previously, the two batches of training in 2014 were the only iterations of the planned advanced and enhancement courses that were implemented. The increasing demand for drug rehabilitation services in the country, coupled with the promulgation of more recent standards of care for drug dependence²⁸, may warrant the development by the DOH, in partnership with professional organizations, of a more comprehensive and sustainable learning and development program in the field of drug rehabilitation for the Philippines. An initial step in this regard will be the conduct of a landscape analysis and training needs analysis to identify the competencies required for each professional group working in the drug rehabilitation field and the levels of performance required at the different segments of the drug rehabilitation pathway (i.e., community-based treatment, out-patient care, in-patient care).^{29,30}

On a more practical level, we note that this paper mainly relied on archival documents to describe the design and outputs of the Level 2a course. Thus, the availability and completeness of certain records related to the training is an inherent limitation of our analysis. One lesson learned from our experience is that groups and organizations involved in training will have to integrate and implement records archiving procedures in their activities to facilitate future training evaluation and research in the field of learning and development. This may mean, for example, exploring the possibility of digitizing training-related records for cloud storage.

The management of drug dependence requires a definitive set of knowledge, skills, and attitudes that will enable professionals in this field to deliver evidence-based, context-

embedded, and quality services to persons who use drugs and their families. Development and design of capability-building initiatives in the field of drug rehabilitation will, in turn, necessitate alignment with practice standards, grounding in the real-world setting in which professionals work, and orientation towards practical learning.

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The evaluation team was assisted by Ms. Chelseah Denise H. Torres and Mr. Patrik James D. Cabrera.

Statement of Authorship

CTA conceptualized the project. CTA, JPG, ECC, and LLC designed the evaluation plan. KLT prepared the first draft of the manuscript. CTA finalized the paper based on comments from authors and reviewer feedback. All other authors provided data, reviewed results, and/or contributed to the report. All authors approved the final version submitted.

Author Disclosure

Most authors (with the exception of KLT) were part of the organizing team and/or training team for the Enhancing Skills in Screening and Assessment for Physicians and Rehabilitation Practitioners Level 2 Course, which is the subject of this paper.

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REFERENCES

1. Bondoc MR. PNP tally: 4,354 dead in anti-drug ops during Duterte admin. GMA News Online [Internet]. 2014 July 11. Available from: http://www.gmanetwork.com/news/news/nation/660096/pnp-tally-4-354-dead-in-anti-drug-ops-during-duterte-admin/story/?utm_source=GMANews&cut...
2. Institute for Health Metrics and Evaluation. GBD Compare [Internet]. 2015 [cited 2019 Oct 10]. Available from <http://vizhub.healthdata.org/gbd-compare>.
3. Congress of the Philippines. Republic Act No. 9165, Comprehensive Dangerous Drugs Act of 2002, June 7, 2002.
4. Punzalan EG. DOH program to support the Duterte anti-drug campaign. Presented at: National Health Summit; 2016 September

- 11; Pasay City, Philippines. Available from: <http://www.doh.gov.ph/sites/default/files/basic-page/3.%20Anti-Drug%20Campaign.pdf>
5. Diez MVV. War on drugs: Public health perspective. Available from: <https://www.ateneo.edu/sites/default/files/Anti-Drug%20Campaigns-Vilma%20Diez.pdf>
 6. Antonio CT, Guevarra JP, Cavinta LL, et al. Lessons learned from government-academe-civil society partnership to improve the assessment and management of drug dependence in the Philippines. *Acta Med Philipp* 2018;52(3):277-280.
 7. Antonio CT, Torres CH, Guevarra JP, Cavinta LL, Castillo EC, Hembra MS, et al. Evaluation of the "Basic Training Course for Physicians on the Assessment and Management of Drug Dependence", 2013-2017. *Int J Training Res.* 2019;17(2):176-86. doi: 10.1080/14480220.2019.1638632.
 8. Antonio CT, Guevarra JP, Cavinta LL, Cabrera PJDL, Castillo EC, Hembra MS, et al. The Philippine experience on the 'basic training course for rehabilitation workers on the assessment and management of drug dependence', 2013-2016. *Int J Training Res.* 2019;17(2):187-98. doi: 10.1080/14480220.2019.1644784
 9. Green AJ, Holloway DG, Fleming PM. An education programme for professionals who specialize in substance misuse in St Petersburg, Russia: Part 1. *Nurse Educ Today.* 2001;21(8):656-62. doi: 10.1054/nedt.2001.0596.
 10. Green AJ, Holloway DG. An education programme for professionals who specialize in substance misuse in St. Petersburg, Russia: part 2. *Nurse Educ Today.* 2002;22(8):648-53. doi: 10.1016/S0260-6917(02)00103-X.
 11. Norsiah A, Whelan G, Piterman L. Training program in the field of addiction medicine - an experience of learning while abroad. *Malays Fam Physician.* 2008;3(1):61-3.
 12. Polydorou S, Gunderson E, Levin F. Training physicians to treat substance use disorders. *Curr Psychiatry Rep.* 2008;10(5):399-404. doi: 10.1007/s11920-008-0064-8.
 13. Olmstead TA, Abraham AJ, Martino S, Roman PM. Counselor training in several evidence-based psychosocial addiction treatments in private US substance abuse treatment centers. *Drug Alcohol Depen.* 2012;120(1-3):149-54. doi: 10.1016/j.drugaledep.2011.07.017.
 14. Srivastava A, Kahan M, Jiwa A. Prescription opioid use and misuse: Piloting an educational strategy for rural primary care physicians. *Can Fam Physician.* 2012;58(4):e210-e6.
 15. Woo SM, Hepner KA, Gilbert EA, Osilla KC, Hunter SB, Muñoz RF, Watkins KE. Training Addiction Counselors to Implement an Evidence-Based Intervention: Strategies for Increasing Organizational and Provider Acceptance. *Cogn Behav Pract.* 2013;20(2):232-244. doi: 10.1016/j.cbpra.2012.03.004.
 16. Lee TK. Addiction education and training for counselors: A qualitative study of five experts. *J Addict Offender Couns.* 2014;35(2):67-80. doi: 10.1002/j.2161-1874.2014.00027.x.
 17. Ayu AP, Schellekens AFA, Iskandar S, Pinxten L, De Jong CAJ. Effectiveness and organization of addiction medicine training across the globe. *Eur Addict Res.* 2015;21(5):223-39. doi: 10.1159/000381671.
 18. Crockford D, Fleury G, Milin R, Buckley L, Charney D, George TP, et al. Training in substance-related and addictive disorders, Part 2: Updated curriculum guidelines. *Can J Psychiatry.* 2015;60(12):1-12.
 19. Ayu AP, El-Guebaly N, Schellekens A, De Jong C, Welle-Strand G, Small W, et al. Core addiction medicine competencies for doctors: An international consultation on training. *Subst Abuse.* 2017;38(4):483-7. doi: 10.1080/08897077.2017.1355868.
 20. Kirkpatrick JD, Kirkpatrick WK. Kirkpatrick's four levels of training evaluation. Alexandria, VA: ATD Press; 2016.
 21. Brereton R, Gerdtz M. Alcohol and other drug (AOD) education for hospital staff: An integrative literature review. *Issues Ment Health Nurs* 2016. doi: 10.1080/01612840.2016.1248876
 22. Ruud T, Flage KB, Kolbjørnsrud OB, Haugen GB, Sorlie T. A two-year multidisciplinary training program for the frontline workforce in community treatment of severe mental illness. *Psychiatr Serv* 2016; 67:7-9. doi: 10.1176/appi.ps.201500199
 23. Broyles LM, Conley JW, Harding Jr JD, Gordon AJ. A scoping review of interdisciplinary collaboration in addictions education and training. *J Addict Nurs* 2013;24:29-36. doi: 0.1097/JAN.0b013e318282751e
 24. Near JA, Martin BJ. Expanding course goals beyond disciplinary boundaries: Physiology education in an undergraduate course on psychoactive drugs. *Adv Physiol Educ* 2007;31:161Y166. doi: 10.1152/advan.00058.2005.
 25. Cobia DC, Center H, Buckhalt JA, Meadows ME. An interprofessional model for serving youth at risk for substance abuse: The team case study. *J Drug Educ* 1995;25:99Y109. doi: 10.2190/3VA1-3R2C-GMCW-L6D7.
 26. United Nations Office on Drugs and Crime [UNODC] and World Health Organization [WHO]. Principles of Drug Dependence Treatment. Discussion paper. 2009.
 27. Dangerous Drugs Board. Treatment and rehabilitation Quezon City: Dangerous Drugs Board; 2013 [cited July 5, 2019]. Available from: <https://www.ddb.gov.ph/sidebar/64-treatment-and-rehabilitation>.
 28. United Nations Office on Drugs and Crime [UNODC] and World Health Organization [WHO]. International Standards for the Treatment of Drug Use Disorders. 2017.
 29. Dangerous Drugs Board. Board Regulation No. 4, series of 2016. Oplan Sagip – Guidelines on voluntary surrender of drug users and dependents and monitoring mechanism of barangay anti-drug abuse campaigns. September 19, 2016.
 30. Department of Health. Administrative Order No. 2017-0018, Guidelines for community-based treatment and support services for persons who use drugs in primary health care settings. August 29, 2017.