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Nursing Care for Persons with Drug Addiction

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Abstract

Persons with drug addiction (PDDs) may exhibit symptoms affecting the central nervous system. Multidisciplinary treatment teams may offer the most updated treatment and care. Pharmacotherapy is one standard treatment, effective in managing psychotic symptoms with supportive psychosocial interventions. As part of the health-care team, nurses deal with PDD on a 24-hour basis. Quality nursing care is essential for improving quality of life, health status, and continued abuse-free status of PDD.

Keywords: nursing, drug addiction, nursing process, intervention, motivation interview, family therapy

1. Introduction

Drug addiction comorbidities are common in persons with psychiatric disorders. About 55% of persons with psychiatric disorders who are medicated with antipsychotics have drug addiction [1] that precipitate and exacerbate psychotic symptoms. Inability to lessen or stop drug use because of psychotic symptoms and their neurological impact creates significant health problems. An estimated 50–75% [2, 3] of persons with drug addiction also have psychiatric disorders, and up to 31% of individuals with psychiatric disorders have a history of drug addiction [4]. Recurrent relapse and the high level of drug addiction have been associated with an increased prevalence of psychotic symptoms [5].

The evidence of drug addiction has evolved in several ways. Lifetime use rates appear to have increased, and early remission from drug addiction disorders is now common. Sustained drug-free remission is well documented, although rates are still low. Research on drug addiction is leading to knowledge in many areas, including characteristics of drug addiction,



reasons for persons with drug addiction (PDDs) seeking substances, effects of different substances upon symptoms, and obstacles to drug use recovery. Dependent drug abusers were noted to be three times likelier to experience psychotic symptoms than nondependent counterparts. This indicates that PDDs are at particularly high risk for psychotic relapse [6].

Drug addiction may contribute to enhanced vulnerability by disrupting neural substrates mediating positive reinforcement. Deficits in cognitive control have been documented in a number of clinical populations with drug addiction. Behavioral and neural profiles occur, including hallucinations, delusions, signs of distractibility, and altered patterns of neural activation involving dopamine-rich frontostriatal brain regions [5, 7].

Drug addiction impacts physical symptoms, including emotional shifts, increased psychosis, cognitive confusion, family conflicts, financial problems, and legal difficulties. This suggests that drug addiction may initially provide relief, but longer term use exacerbates psychiatric symptoms. Individuals also noted that the advantages of quitting include improved physical symptoms, higher self-esteem, and increased social relationships. This suggests that individuals were aware of the impact of drug addiction on psychiatric symptoms and interpersonal relationships. Individuals reported that disadvantages of quitting drugs include withdrawal symptoms, relapse cycles, loss of substance-abusing friends, cravings, and pressure to abuse drugs.

PDD struggle with lifelong addictions to prescription drugs, taken to cope with life events presented physical and psychological stress. As a team, professional nurses working in hospital and community care should be sensitive to PDD and identify strategies for addressing their issues. Positive nursing outcomes improve their quality of life.

2. Reasons for drug addiction

Studies pinpoint five general explanations for high rates of PDD:

- **1.** Achieving and increasing feelings of intoxication [8, 9].
- 2. Relieving negative emotional states such as frustration, fear, anxiety, depression, for relief from fatigue or boredom, and as a break from daily routines with altered states of consciousness [3, 10, 11].
- **3.** Enhancing socialization skills through self-medication for positive and negative symptoms and decreasing dysphoria associated with psychotic symptoms and negative side effects from antipsychotic medications [8].
- 4. Responding to peer pressure, relieving negative effects such as depression, and experimenting [9].
- 5. While there is some evidence for the self-medication hypothesis, most research does not support theories that drug addiction occurs to decrease psychiatric symptoms or cope with negative side effects of medications [5, 8, 9, 12].

3. Effects of drug addiction

Drug addiction affects biological, psychological, and social condition of mental and emotional states, stimulating pleasure centers of the brain. Psychotic symptoms of drug addiction follow:

3.1. Impact on physiology

Much evidence suggests that drug addiction negatively and directly affects underlying neuropathology of psychiatric disorders. This may enhance addiction vulnerability by disrupting neural substrates mediating positive reinforcement; increasing hallucinations, delusions, and signs of distractibility; and displaying altered patterns of neural activation involving dopamine-rich frontostriatal brain regions, injury, human immunodeficiency virus (HIV), hepatitis, cardiovascular, liver, and gastrointestinal diseases. In the longer term, drug addiction impairs daily life by disrupting frontostriatal reward-learning signals. Intravenous drug abuse may induce psychotic symptoms by significantly attenuating the reward prediction error signal in the limbic striatum and the incentive value signal in the ventromedial prefrontal cortex. Drug-induced behavioral changes may occur leading to lower rates of reward-related reinforcement learning (RL). The degree to which drugs disrupt encoding of incentive values in the ventromedial prefrontal cortex and posterior cingulate correlates with the degree to which drugs induce mild psychotic symptoms [3, 5, 7]. According to Bernacer et al. [10], (a) "disturbance in the ways that affected individuals evaluate stimuli and learn associations leads to mistaken evaluation of irrelevant phenomena as motivationally salient and to faulty association of unconnected ideas and events, ultimately leading to the emergence of characteristic alterations in perceptions and beliefs."

3.2. Impact upon psychology

Drug addiction exacerbates social alienation and increases potential for violent lashing out and low self-esteem, along with poor coping skills. Under these circumstances, emotional, social, or symptom-related cues can provoke recourse to available substances and suicidal ideation. They may also contribute to psychosocial instability, self-image issues, and achievement motivation. In some cases, social hostility and rejection may result. Friends and family of persons also experience distress, tension, and conflict in these relationships. Interpersonal conflicts are often associated with dual diagnoses. Friends and families may be frustrated with ongoing substance misuse that the users themselves may not see as problematic [13–16].

3.3. Impact on socialization

Short-term impact may devastate the lives of persons and severely disrupt families. Persons may withdraw from their environment with regressive behavior, fail to engage with others, or even notice physical illness and pain [3]. Social exclusion and homelessness may ensue. In the longer term, psychosis and its potential disruption of the capacity to fulfill social roles can result in further burdens. Severe, untreated symptoms may result in social, familial, and occupational

dysfunction. Severe symptoms are likely to result in patient stigmatization of self and loved ones, inadequate clinical care and rehabilitation, and the stigma of shame and family burden. Many family members hide their relationships or consider the illness to be a source of stigma when a relative suffers from PDD. Those in contact with dual-diagnosis persons may also experience distress, tension, and conflict within these relationships. Interpersonal conflicts are often associated with dual diagnoses [3, 15, 17, 18].

3.4. Impact upon treatment adherence

Rates of treatment noncompliance may decrease, reducing motivation for change and making engagement more difficult. Persons may drop out of long-term programs, retard progress, and destabilize illnesses, contributing to psychosocial instability [16, 19].

4. Treatment modalities of PDD

Professional nurses have observed that PDDs have a low tolerance for stressors and a narrow repertoire of coping skills, some of them unhelpful even in the short term. These PDDs frequently develop idiosyncratic avoidance methods to manage positive symptoms such as delusions and hallucinations. These methods may become habitual and generalized. Research has suggested the following treatment modalities:

4.1. Pharmacotherapy

Antipsychotics are a standard treatment for PDD, effectively managing symptoms. Case studies demonstrate that the antidepressant olanzapine may reduce psychotic symptoms induced by drug addiction. Dopamine antagonists have also demonstrated effectiveness in decreasing drug addiction. Research has shown that psychotic symptoms are associated with changes in brain chemistry. Antipsychotic medications restore the brain's natural chemical balance, reducing or eliminating psychotic symptoms. Medications may require weeks to work. Conventional antipsychotics are dopamine antagonists and target one of five subtypes of dopamine receptors in the brain. Dopamine 2 (D2) receptor antagonism in the mesolimbic tract improves hallucinations and delusions, but the conventional antipsychotic blockade of all D2 receptors causes other problems. Antagonizing D2 receptors in the mesocortical dopamine pathway worsens negative symptoms including avolition, anhedonia, alogia, and affective flattening. Atypical antipsychotics antagonize serotonin 5HT2A receptors as well as D2 antagonism seen with conventional antipsychotics. Serotonin affects dopamine differently in each of the four pathways. In the nigrostriatal pathway, serotonin antagonism increases dopamine release, resulting in fewer reports of movement disorders. Serotonin antagonism in the tuberoinfundibular pathway eliminates serotonin's ability to increase prolactin levels, mitigating the effect of two blockades in this pathway. In the mesocortical pathway, where serotonin 2A receptors predominate, antagonizing serotonin increases dopamine. This is thought to be responsible for improved cognition, affection, and motivation seen with antipsychotics. Weak serotonin 2A antagonism in the mesolimbic tract cannot reverse dopamine antagonism; D2 receptors remain blocked, and hallucinations and delusions decrease. Pharmacotherapy remains the main effective treatment for PDD.

4.2. Supportive psychosocial interventions

Supportive psychosocial therapies have been used as adjuncts to pharmacotherapy [20] and psychoeducation programs to alleviate residual symptoms; improve social functioning, quality of life, and medication adherence; and reduce relapse and rehospitalization. Details of supportive psychosocial intervention follow:

4.2.1. Individual approaches

4.2.1.1. Motivational approaches

Motivational counseling works according to the idea that motivation for change is dynamic rather than static. Professional uses may influence change by developing a therapeutic relationship to increase therapeutic alliance, developing insight, and coping skills to resolve ambivalence and change health-related behavior. Professional nurses follow five motivational approach principles:

- Expressing empathy through reflective listening
- Identifying discrepancies between patient goals or values and behavior
- Avoiding argument and direct confrontation
- Coping with resistance
- Supporting self-efficacy

4.2.1.2. Cognitive behavioral therapy (CBT)

Bellack and DiClemente [footnote] outline a treatment protocol acknowledging that behavioral change is a longitudinal process consisting of several stages. "Escalating symptoms and other warning signs must be recognized, cravings coped with, coming up with healthy alternative activities developed, drug addiction lapses normalized, lapse or relapse plans developed, and cognitive restructuring counteracting positive beliefs about substance use devised." Barriers to significant personal changes include lack of motivation, impaired cognition, and social skill limitations. Low motivation, energy levels, and mood, common within this group, may arise from medication, illness, or constrained life circumstances. They provide obvious challenges for engagement, goal setting, and therapy continuance. Deficits in attention, concentration, and abstract thinking, as well as thought blocking, may impede information processing, problem-solving, and realistic planning. Underdeveloped social interaction skills required to meet people and maintain relationships may result in the absence of a healthy social support system to sustain persons through change processes, as well as in difficulties resisting pressure from substance-using peers (Table 1).

Many studies of cognitive behavioral therapy (CBT) and motivational interviewing (MI) with contingency management or standard care, comprising 6 months of supportive group therapy, revealed positive outcomes [15].

4.2.1.3. Family support

Family support may enhance individual and group treatment with case management or assertive community with enhanced substance use treatment services to reduce or eliminate drug addiction [21].

4.2.1.4. Relapse prevention

Relapse prevention strategies have been widely shown to be effective [22]. Behavioral change is difficult, but change related to drug addiction is even more difficult because of chemical imbalance in the brain thereby induced. Persons rarely make sudden or drastic behavioral changes and maintain them with no return to previous behavior.

4.2.2. Group intervention

4.2.2.1. Group dynamic

Positively, group interactions for PDD have the potential to change social attitudes and behaviors and are generally cost-effective. For decades, structured behavioral and social skill training was utilized to rehabilitate persons with long-term mental illnesses to overcome difficulties in concentration and learning. As Horsfall et al. [23] noted "At the micro-level, programs encourage participants to explore thoughts and expectations that are a help or hindrance, as well as address interpersonal stressors and supports." Such programs aim to improve conversational skills and social functioning and develop problem-solving skills, such as overcoming practical problems with self-care, money management, shopping, cooking, and employment readiness. Substance abusers have to learn to recognize high-risk

Nursing aims	Nursing strategies		
Enhance self-control	 Goal setting Functional analysis of drug addiction antecedents and consequence Self-monitoring Learning alternative coping skill 		
Enhance behavior contracting	 Creating a written agreement with the patient that specified targeted patient behavior and consequences 		
Enhance social skills	 Learning skill for forming and maintaining interpersonal relationship, assertiveness, and say no from drug 		
Contingency management	 Patients receiving incentives or rewards for adaptive behavior or meeting specific behavioral goals. It is based on principles of operant conditioning, which posit that behavior that is followed by positive consequences is more likely to be repeated. It supports the view that positive incentives are more effective in producing improved outcomes than negative consequences 		

Table 1. Nursing strategies to enhance self-control, self-efficacy, and social skills in CBT.

situations (such as carrying money and proximity to easy drug access locations and people) and to participate in role play to develop personalized ways of avoiding or extricating themselves from those situations. "Realistic relapse-prevention approaches have to be tailored to each participant's abilities and style" [23].

4.2.2.2. Self-help groups

Self-help groups often play important and meaningful roles for persons with dual diagnoses, offering essential social support from others who understand the difficulties of remaining sober. They provide a structure for daily living and commitment to stopping drug abuse. Research reveals that PDDs who consistently attend self-help groups for at least 1 year achieve reduced drug addiction outcomes [4, 22].

4.2.2.3. Assertive community treatment (ACT)

ACT is a structured health-care service approach to working with dual-diagnosis PDDs, particularly by adapting a conventional model of case management to the needs of the PDD cohort [4]. Usual case manager responsibilities include developing a working alliance with PDDs, linking them to relevant other services, and functioning as an advocate for these services with health professionals [22].

4.2.2.4. Case management

Case managers are central to PDD engagement, treatment, and retention. A study of standard outpatient case management found that case management is effective in preventing hospitalization and drug abuse relapse [24, 25].

4.3. Treatment principles

From research published over the past decade, Drake et al. [23] outlined ten principles essential for effective treatment of PDD, including engagement strategies, motivational counseling, stage-wise interventions, active treatment, long-term program retention, integrated mental illness and drug addiction treatments, and relapse-prevention strategies. Further comprehensive services such as peer support, family education and interventions, liaison with the criminal justice system, housing, and vocational rehabilitation should also be available, along with specialized programs for those with more complex disorders, cognitive impairment, and treatment resistance, as well as for minority groups [23]. In addition, services need to be flexible in order to cater to actual consumer needs, given their real-life circumstances. Hence, there is likely to be a "window of opportunity" for effective prevention or reduction of drug use shortly after a first psychotic episode.

4.4. Potential treatment models

Sequential, parallel, and integrated service models are applied for persons with drug addiction and dual diagnoses. Firstly, they are treated for one condition by sequential treatment. Secondly, person with dual diagnoses was treated by the parallel model at the same time [23].

Integrated treatment is a combination of treatment modalities from the psychiatric and mental health-care team that focus on conditions simultaneously and work with the coordinated interaction between service providers, or they are working together as one team in the hospital [24, 26]. The integrated programs require mental health staff to coordinate a range of approaches, such as detoxification, medication management, CBT, and MI—which is often problematic due to limited resources and the absence of well-defined guidelines.

In summary, recommendations for treating PDD covered three broad areas: screening, assessment, and planning; psychosocial and pharmacological treatment; and systems of service provision, with the fundamental issue being that of coordinating across federal and state departments and across area health services and individual agencies. The initial focus when developing treatment plans must be on encouraging a therapeutic alliance with the PDD and on offering MI, CBT, contingency management, skills training along with education and support for family and caregivers, relapse prevention, case management, and promoting positive health support from others (including family members and non-substance-using friends). Furthermore, the use of atypical antipsychotic medications may facilitate adherence since they are associated with fewer side effects and have been shown to benefit persons with PDD. Regardless of whether services follow integrated or parallel models, multidisciplinary treatment team should be well coordinated, take a team approach, have specialist-trained personnel (including 24-hour access), include a range of program types, and provide for long-term follow-up [4, 20, 25].

5. Vulnerability-stress model of drug addiction

The major focus of this paper was focused on nursing intervention in perspective of two types of human responses—reactions to actual health problems or illness (health-restoring responses) and concerns about potential health problems (health-supporting responses) [28]. The vulnerability-stress model determines the factors that affect schizophrenic psychotic symptoms and integrates a holistic perspective in which both biological and psychological variables explain the onset, course, and psychotic symptoms. Additionally, this model illustrates the interaction between four factors, which can be further subdivided [28, 29] as follows:

5.1. Personal vulnerability factors

The factors of the model are dopaminergic dysfunction, reduced available processing resources, autonomic hyperactivity, and schizotypal personality traits. The dopaminergic dysfunction will reduce the activation of processing resources and affect tonic autonomic hyper activation. The interaction of the personal vulnerability factors and personal protectors leads the vulnerable individual to develop prodromal symptoms of drug use. However, the personal vulnerability factors are associated between the inherited genetic factors and/or early biological factors [28]. These factors have been thought to contribute to vulnerability to congenitally compromise brain structure and function.

Therefore, nurse should be aware with the assessment about biological factors such as genetic drug use to design nursing intervention.

5.2. Personal protective factors

These factors include (i) coping skills and self-efficacy and (ii) antipsychotic drug and self-efficacy: for this study, the researcher used the terms of medical use self-efficacy to describe self-efficacy as confidence in one's ability to perform a given task such as taking antipsychotic medications as prescribed.

Nurse should be concerned that the strength of self-efficacy for appropriate antipsychotic use plays an important role to take antipsychotic, continue on treatment program, and balance neurotransmitters in the brain, especially dopamine and norepinephrine, which decrease psychotic symptoms. Thus, psychoeducation of medication self-efficacy program is needed.

Moreover, coping is a behavioral and cognitive effort to cope with situations that are appraised as stressful in PDD's life and the pressure from family members because they often lack the information-processing skills to process optimum behavioral alternatives and the social skills to put these strategies into action [27, 29–31]. For this reason, nurse should enhance coping skills, medication self-efficacy, information-processing skills, and social skill in PDD by designing program interventions that possibly help to make information-processing skills easier than the past by implementation via information system and interactive system such as website, Facebook, and mobile phone.

5.3. Environmental protective factors

These factors include effective family problem-solving and supportive psychosocial interventions.

Effective family problem-solving refers to the ability of family members to solve their problems, not only the individual problems of PDD but also the problems of all family members, which are always related to the conditions of each individual's life, his or her household, the neighborhood or town, and the larger community [5].

Social support: stress factors can exacerbate the psychotic symptoms. Therefore, the support from family, friends, medical specialists, or clinical practitioners represents the key components in helping persons to raise the protective factors for the reduction of symptoms severity.

Supportive psychosocial interventions: the combination of pharmacotherapy and psychosocial intervention has been recommended for treatment of PDD to reduce psychotic symptoms, and the individuals can be effectively engaged and continue the treatment [32]. In order to meet the goals of intervention in terms of reducing the stress of the patient, provide support for relapse prevention, promote adaptation of patient to living in the community, and facilitate continued decrease in symptoms and consolidation of remission, social support and supportive psychosocial interventions are recommended for the nursing role.

5.4. The environmental potentiates and stressor

According to the model, the environmental potentiates and stressor compose of the critical or emotionally over-involved attitudes toward the patient, an overstimulating social environment, and stressful life events.

The critical or emotionally over-involved attitude toward the patient is, namely, expressed emotion; according to this alternative model, there might not be a causal relationship between the highly expressed emotion (EE) of significant others and relapse; they might be jointly related to a third variable (severity of illness). Combine these two models by postulating feedback loops from behaviors of patient to attitudes and behaviors of significant others, thereby creating bidirectional influence patterns [29, 30].

This model views the social environment as stressful life events and highly expressed emotion. The occurrence of key life events leading to a high level of environmental stress interacts with preexisting biological vulnerability factors and increases the likelihood that psychotic symptoms will return. Additionally, critical and emotionally over-involved attitudes at least partially represent responses to the heavy burden that mental illness places on significant others and that the persons who have a more severe, relapse-prone form of illness place the heaviest burden on significant others.

For stressful life events, empirical data indicated that stressful life events rule on independent of the patient's behavior are more common in the weeks immediately before relapse. Additionally, the initial findings showed the roles of stress factors in other aspects of the early course of drug use that have significant associations with social functioning. Moreover, stressors in the form of stressful life events are realized as factors that interact with preexisting vulnerability characteristics to produce vicious circles, which lead, in turn, to psychotic episodes.

All of expressed emotion, both negatively expressed emotion and positively emotional expressed emotion, and stressful life events were included in nursing implementation for PDD.

5.5. Outcomes

This model indicated that the outcomes were social function, psychotic symptoms, and occupational functioning.

Social function (social dysfunction) is a hallmark characteristic of PDD that has important implications for the development, course, and outcome of illness. Additionally, social dysfunction generally worsens over the course of the disorder and is often resistant to drug treatment [31, 32].

Psychotic symptoms are a central element of drug use and are the outcome factors that reverse to other factors. Coping, self-efficacy, EE, stressful life events, and social functioning lead to the severity of psychotic symptoms that are exacerbated by drug use.

Occupational functioning of drug use is associated with a significant decrease in such functioning. "Less than 20% of individuals with PDD can maintain regular employment, and there is a relationship between psychotic symptoms and occupational functioning among PDD." Empirically derived factor structures have shown that symptoms fall into five components. One such factor structure is derived from the following components: positive, negative, hostility, cognitive, and emotional discomfort.

Occupational functioning is defined as competency with one's task performance associated with valued roles, sense of self-satisfaction, productivity, communication/interaction skills, leisure and rest in response to demands of the internal and/or external environment, and

environments, where context, temporal factors, and physical and psychological phenomena are inseparable (**Figure 1**).

In conclusion, the prevalence of PDD can be as high and create vulnerability for drug use. Providing optimal care and intervention for this population such as (a) awareness and assessment about biological factors, (b) enhanced personal skill (coping skills, medication self-efficacy, information-processing skills, and social skill), (c) supportive psychosocial interventions, (d) social support, (e) expressed emotion program, (f) social function intervention, and (g) occupational functioning program, these all require development and implementation of a best practice protocol.

6. Nursing care for persons with drug addiction

Nursing interventions are helping PDD acknowledge the drug addiction and facilitating development of effective coping skills, medication self-efficacy, information-processing skills, occupational skill, and social skill by using the nursing process to (a) assessment information and health-care needs of PDD and (b) identified nursing diagnosis based on NANDA International (NANDA-1) classification system. Nursing diagnosis of PDD includes acute confusion, ineffective coping, and dysfunctional family process:

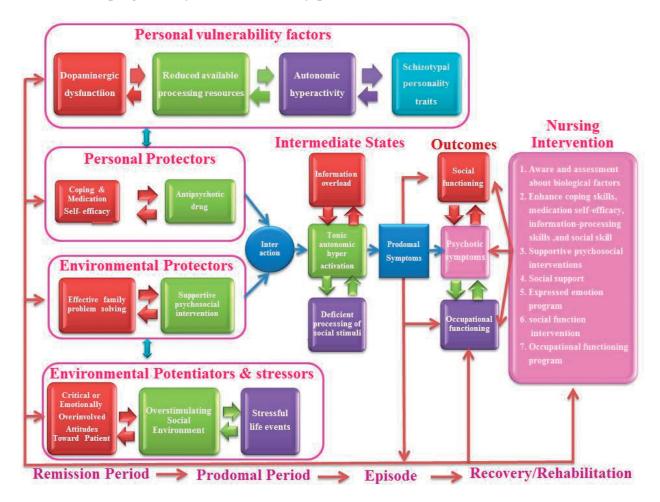


Figure 1. Vulnerability-stress model of nursing intervention for PDD adapted from vulnerability-stress model [28–30].

- 1. Supportive psychosocial interventions
- 2. Social support
- 3. Expressed emotion program
- 4. Social function intervention
- 5. Occupational functioning program

Professional nurse is working as an integral part of the multidisciplinary treatment team in caring of symptomatic care, limits setting, structured support, psychoeducation, and referrals for continuing care in the community. Family and caregivers are significant in the treatment program to be the part of resolving the problem and feelings surrounding the persons' drug use to facilitate recovery sessions.

6.1. Nursing diagnosis: disturbed sensory perception (specify: visual, auditory, kinesthetic, gustatory, tactile, olfactory)

Change in the amount or patterning of incoming stimuli accompanied by a diminished, exaggerated, distorted, or impaired response to such stimuli.

6.1.1. Assessment data

- Positive psychotic symptoms
- Disorientation
- Fear
- Low concentrate
- Cannot perform personal hygiene or grooming

6.1.2. Nursing outcomes

•	Immediate	Persons with drug addiction will:
		Be oriented to person, time, place, and situationEstablish a balance of rest, sleep, and activity
		Establish adequate nutrition, hydration, and eliminationPerform in self-care activities
•	Stabilization	Persons with drug addiction will:
		Maintain adequate, balanced physiologic functioningCommunicate effectively with others
•	Community	Persons with drug addiction will:
		 Demonstrate independence in self-care activities Manage chronic illnesses, if any, effectively Avoid the use of drugs or other precipitating factors

6.1.3. Implementation

- 1. Assessment data include hallucinations, disorientation, fear, low concentrate, and ability to perform to personal hygiene or grooming.
- 2. Be alert to the PDD's physical needs because of crucial. He or she may not attend to hunger, fatigue, and so forth.
- 3. Observe the PDD's patterns of food and fluid intake; monitor and record intake, output, and daily weight. Adequate nutrition is important for the PDD's well-being.
- 4. Monitor the PDD's elimination patterns by using PRN medication to the PDD to maintain bowel regularity. Constipation is a frequent side effect of major tranquilizers.
- 5. Calming activities before bedtime facilitate rest and sleep. Institute relaxing, quieting activities before bedtime (tepid bath, warm milk, quiet environment).
- 6. Present reality by spending time with the PDD to facilitate reality orientation because your physical presence is the reality.
- 7. Reorient the PDD to person, place, and time as necessary, by using the PDD's name often and by telling the PDD your name, the date, the place and situation, and so forth because reminding the PDD of surroundings, people, and time increases reality contact.
- 8. Evaluate the use of touch with the PDD. Touch can be reassuring and may provide security for the PDD.
- 9. Be simple, direct, and concise when speaking to the PDD. Talk with the PDD about concrete or familiar things; avoid ideological or theoretical discussions. The PDD's ability to process abstractions or complexities is impaired.
- 10. *Direct activities toward helping the PDD accept and remain in contact with reality; use recreational or occupational therapy when appropriate. The greater the PDD's reality contact and involvement in activities, the less time he or she will deal in unreality.
- 11. Provide information and explanations to the PDD's family or significant others.

The family or significant others may have difficulty understanding that psychotic behavior is related to medical illness.

7. Evaluation of nursing outcomes

7.1. Nursing diagnosis: ineffective denial

Conscious or unconscious attempt to disavow the knowledge or meaning of an event to reduce anxiety and/or fear, leading to the detriment of health.

7.1.1. Assessment data

- Dose and frequency of drug use or dependence
- Insight

- Blaming others
- Help-seeking
- Accepting personal responsibility
- Poor self-perception
- Intellectualization

7.1.2. Nursing outcomes

- Immediate Persons with drug addiction will:
 - Participate in treatment program
 - Identify negative effects of his or her behavior on others
 - Abstain from drug use
 - Verbalize acceptance of responsibility for own behavior
- Stabilization Persons with drug addiction will:
 - Express acceptance of drug dependence as an illness
 - Maintain abstinence from chemical substance
 - Demonstrate acceptance of responsibility for own behavior
 - Verbalize knowledge of illness and treatment plan
- Community Persons with drug addiction will:
 - Follow through with discharge plans regarding employment, support groups, and so forth

7.1.3. Implementation

- Assessment data include minimization of drug use or dependence, blaming others for problems, reluctance to discuss self or problems, poor insight, failure to accept responsibility for behavior, viewing self as different from others, and rationalization of problems (intellectualization).
- Avoid the PDD's attempts to focus on only external problems (such as marital or employment problems) without relating them to the problem of substance use. The problem of substance use must be dealt with first because it affects all other areas.
- Encourage the PDD to identify behaviors that have caused problems in his or her life. The PDD may deny or lack insight into the relationship between his or her problems and behaviors.
- Do not allow the PDD to rationalize difficulties or to blame others or circumstances beyond the PDD's control. Rationalizing and blaming others give the PDD an excuse to continue his or her behavior.

- 5. Consistently redirect the PDD's focus to his or her own problems and to what he or she can do about them. You can facilitate the PDD's acceptance of responsibility for his or her own behavior.
- **6.** Encourage other PDD in the program to provide feedback for each other. Peer feedback usually is valued by the PDD, because it is coming from others with similar problems.
- 7. Positively reinforce the PDD when he or she identifies and expresses feelings or shows any insight into his or her behaviors and consequences. You convey acceptance of the PDD's attempts to express feelings and to accept responsibility for his or her own behavior.
- 8. Evaluation of nursing outcomes.

7.2. Nursing diagnosis: ineffective coping

Inability to form a valid appraisal of the stressors, inadequate choices of practiced responses, and/or inability to use available resources.

7.2.1. Assessment data

- Stressful life crisis
- Isolative behavior
- Low self-esteem
- Impulse control
- Superficial relationships
- Effective problem-solving skills
- Ineffective coping skills
- Inability to form and maintain intimate personal relationships
- Avoidance of problems or difficult situations

7.2.2. *Nursing outcomes*

- Immediate Persons with drug addiction will:
 - Express feelings directly and openly
 - Engage in realistic self-evaluation
 - Verbalize process for problem-solving
 - Practice nonchemical alternatives to dealing with stress or difficult situations
- Stabilization

Persons with drug addiction will:

- Develop a healthful daily routine regarding eating, sleeping, and so forth
- Verbalize increased self-esteem, based on accurate information

Community

Persons with drug addiction will:

- Demonstrate effective communication with others
- Demonstrate nonchemical methods of dealing with feelings, problems, and situations
- Participate in follow-up or aftercare programs and support groups

7.2.3. Implementation

- Assessment data include stressful life crisis, isolative behavior, low self-esteem, impulse
 control, superficial relationships, effective problem-solving skills, ineffective coping skills,
 inability to form and maintain intimate personal relationships, and avoidance of problems
 or difficult situations.
- 2. Encourage the PDD to explore alternative ways of dealing with stress and difficult situations. The PDD may have little experience dealing with life stress without chemicals and may be learning for the first time how to cope, solve problems, and so forth.
- **3.** Help the PDD develop skills in defining problems, planning problem-solving approaches, implementing solutions, and evaluating the process. You can provide knowledge and practice of the problem-solving process in a nonthreatening environment.
- **4.** Help the PDD express feelings in acceptable ways, and give positive reinforcement for doing so. You are a sounding board for the PDD. Your feedback encourages the PDD to continue to express feelings.
- 5. Involve the PDD in a group of his or her peers to provide confrontation, positive feedback, and sharing of feelings. Groups of peers are a primary mode of treatment in drug addiction treatment, and provide honesty, support, confrontation, and validation, based on common experiences.
- 6. Focus attention on the "here and now": what can the PDD do now to redirect his or her behavior and life? The PDD cannot change the past. Once he or she acknowledges responsibility for past behavior, it is not helpful or healthy to ruminate or feel guilty about the past.
- 7. Avoid discussing unanswerable questions, such as why the PDD uses substances.

Asking why is frustrating as well as fruitless; there is no answer.

8. Guide the PDD to the conclusion that sobriety is a choice he or she can make

Sobriety, including abstinence from all substances, is associated with greater success in recovery.

Help the PDD view life and the quest for sobriety in feasible terms, such as "What can I do
today to stay sober?" The PDD have many barriers to success in abstinence. External
stimuli and internal stimuli are the big deal to challenge their self-control to say no and
stop using drug.

- 2. *Refer the PDD to a chaplain or spiritual advisor of his or her choice, if indicated. The PDD may be overwhelmed with guilt or despair. Spiritual resources may help the PDD maintain sobriety and find social support.
- *Teach the PDD and significant others about prevention of hepatitis and HIV transmission, and refer them for testing and counseling if appropriate. PDD who use substances are at increased risk for hepatitis and HIV transmission by sharing needles and by sexual activity, especially when judgment is impaired by drug use.
- 4. *Refer the PDD to vocational rehabilitation, social services, or other resources as indicated. The PDD may need a variety of services to reestablish successful functioning.
- 5. *Refer the PDD and significant others to join motivation interview session or other support groups in the community or via the Internet as indicated. Many PDDs and significant others benefit from continued support for sobriety after discharge. *Note:* There are many different groups modeled on the basic 12-step program, including gay, lesbian, and non-Christian groups.
- **6.** *Refer the PDD for treatment for other problems as indicated. Drug dependence often is associated with posttraumatic behavior, abusive relationships, and so forth.
- 7. Evaluation of nursing outcomes.

8.1. Nursing diagnosis: risk for injury

At risk of injury as a result of environmental conditions interacting with the individual's adaptive and defensive resources.

8.1.1. Assessment data

8.1.1.1. Risk factors

- Feelings of hostility
- Fear
- Cognitive deficits
- Emotional impairment, mood alteration, and drastic mood swings
- Integrative dysfunction
- Sensory or motor deficits
- Inability to perceive harmful stimuli
- Confusion
- Uncooperative, hostile behavior
- Disorientation
- Seizures

- Hallucinations
- Delusions
- Physical pain or discomfort
- History of combative or acting-out behavior
- Disturbances of concentration, attention span, or ability to follow directions

8.1.2. Nursing outcomes

•	Immediate	Persons with drug addiction will:
		 Be safe and free from injury Demonstrate decreased aggressive or hostile behavior Respond to reality orientation Verbally express feelings of fear or anxiety Not harm others or destroy property Be free from toxic substances
•	Stabilization	Persons with drug addiction will:
		 Demonstrate adherence to the treatment regimen Verbalize knowledge of drug abuse as a disease Verbalize risks related to drug ingestion Verbalize plans for further treatment, if indicated
•	Community	Persons with drug addiction will:
		 Abstain from the use of substances Accept referral to drug abuse treatment Participate in treatment or follow-up care as needed

8.1.3. Implementation

- Assessment data include feelings of hostility, fear, cognitive deficits, emotional impairment, integrative dysfunction, sensory or motor deficits, inability to perceive harmful stimuli, mood alteration, drastic mood swings, confusion, uncooperative, hostile behavior, disorientation, seizures, hallucinations, delusions, physical pain or discomfort, history of combative or acting-out behavior, disturbances of concentration, attention span, or ability to follow directions.
- **2.** Place the PDD in a room near the nurses' station or where the staff can observe the PDD closely. The PDD's safety is a priority.
- 3. It may be necessary to assign a staff member to remain with the PDD at all times. One-to-one supervision may be required to ensure the PDD's safety.
- **4.** Institute seizure precautions as needed, according to hospital policy (padded side rails, airway at bedside). You should be prepared for the possibility of withdrawal seizures.

- 5. Restraints may be necessary to keep the PDD from harming himself or herself. If the PDD cannot be protected from injury in any other manner, restraints may become necessary. Restraints are not to be used punitively.
- 6. Do not moralize or chastise the PDD for substance use. Maintain a nonjudgmental attitude. Remember that substance use and substance abuse are illnesses and out of the PDD's control at this time. Moralizing belittles the PDD.
- Talk with the PDD using simple, concrete language. Do not attempt to discuss the PDD's feelings, plans for treatment, or possible changes in the PDD's lifestyle while the PDD is influenced by the drug or in acute or severe withdrawal. The PDD's ability to process abstractions is impaired during withdrawal. You and the PDD will be frustrated if you attempt to address interpersonal or complex issues at this point.
- 8. Reorient the PDD to person, time, place, and situation as indicated when the PDD is confused or disoriented. Presentation of concrete facts facilitates the PDD's reality contact.
- 9. Decrease environmental stimuli (bright lights, television, visitors) when the PDD is agitated. Avoid lengthy interactions; keep your voice soft; and speak clearly. Your presence and soft tones can be calming to the PDD. He or she is not able to deal with excessive stimuli.
- 10. Reassure the PDD that the environment is safe by briefly and simply explaining procedures, routines, and so forth. The psychotic PDD frequently acts out based on fear as a means of protecting himself or herself.
- 11. Protect the PDD from harming himself or herself by removing the items that could be used in self-destructive behavior or by restraining the PDD. The PDD's physical safety is a priority.
- 12. Remove the PDD to a quiet area, or withdraw your attention if the PDD acts out, provided there is no potential danger to the PDD or others. Decreased attention from you and others may help to extinguish unacceptable behavior.
- 13. Set limits on the PDD's behavior when he or she is unable to do so if the behavior interferes with other PDDs or becomes self-destructive. Do not set limits to punish the PDD. Limit setting is the positive use of external control to promote safety and security.
- 14. Evaluate the PDD's response to the presence of family and significant others. If their presence helps calm the PDD, maximize their visiting time, but if the PDD becomes more agitated, limit visits to short periods of time with one or two people at a time.
- **15.** Evaluation of nursing outcomes.

8.2. Nursing diagnosis: ineffective health maintenance

Inability to identify, manage, and/or seek out help to maintain health.

8.2.1. Assessment data

- Fear
- Drug addiction and dependence

- Physical discomfort
- Sleep disturbances
- Low self-esteem
- Ineffective coping strategies
- Feelings of apathy
- Physical symptoms (impaired nutrition, fluid, and electrolyte imbalance)

8.2.2. Nursing outcomes

- Immediate Persons with drug addiction will:
 - Establish nutritious eating patterns
 - Establish a balance of rest, sleep, and activity
 - Establish physiologic homeostasis
- Stabilization Persons with drug addiction will:
 - Maintain physiologic stability
 - Verbalize knowledge of prevention of HIV transmission
 - Agree to participate in a treatment program
- Community Persons with drug addiction will:
 - Follow through with discharge plans regarding employment, legal involvement, family problems, and financial difficulties
 - Abstain from alcohol and drugs

8.2.3. Implementation

- 1. Assessment data include fear, drug addiction and dependence, physical discomfort, sleep disturbances, low self-esteem, ineffective coping strategies, feelings of apathy, and physical symptoms (impaired nutrition, fluid, and electrolyte imbalance).
- 2. *Obtain the PDD's history, including the kind, amount, route, and time of the last drug use. Consult the PDD's family or significant others to obtain or validate the PDD's information if necessary. *Note:* The PDD may report an inaccurate estimate of drug use (either minimized or exaggerated). Baseline data can help you anticipate the onset, type, and severity of physical withdrawal symptoms.
- **3.** Be aware of PRN medication orders to decrease physical symptoms. Do not allow the PDD to be needlessly uncomfortable, but do not use medications too liberally. The judicious use of PRN medications can decrease the PDD's discomfort but must be used cautiously, as the PDD is already experiencing drug effects.
- 4. Blood test and urine specimens are needed for drug screening on admission.
- 5. Laboratory tests may need to be surrendered to authorities.

- **6.** Monitor the PDD's intake and output and any pertinent laboratory values, such as electrolytes. The PDD in withdrawal is at risk for fluid and electrolyte imbalances.
- 7. Encourage oral fluids, especially juice, fortified malts, or milk. If the PDD is vomiting, intravenous therapy may be necessary. Milk, juice, and malts provide a maximum of nutrients in a small volume. Fluids usually are tolerated best by the PDD initially.
- **8.** Talk with the PDD quietly in short, simple terms. Do not chatter or make social conversation. Excessive talking on your part may be irritating to the PDD in withdrawal.
- **9.** Be comfortable with silence. You may touch or hold the PDD's hand if these actions comfort or reassure the PDD. Your physical presence conveys your acceptance of the PDD.
- **10.** Encourage the PDD to bathe, wash his or her hair, and wear clean clothes. Personal cleanliness will enhance the PDD's sense of well-being.
- 11. Assist the PDD as necessary; it may be necessary to provide complete physical care depending on the severity of the withdrawal symptoms. You should attend to the PDD's hygiene only to the extent that he or she cannot do so independently.
- **12.** *Teach the PDD that substance dependence is an illness and requires long-term treatment and follow-up. Refer the PDD to a substance dependence treatment program. A substance withdrawal program deals only with the PDD's physical dependence. Further therapy is needed to address the primary problem of substance dependence.
- 13. Family and significant others are affected by the PDD's drug use and also need help with their own issues. Dealing with relapses was difficult, and public resources were lacked. The coping strategies that they use were suggestion, religiosity and faith, isolation, and ambivalence in thoughts and attitudes [32]. Therefore, nurse should enhanced coping strategies and knowledge in family members and significant others of PDD as well.
- **14.** Teach the PDD about the prevention of HIV transmission. PDD who use intravenous drugs are at increased risk for HIV transmission by sharing needles and by sexual activity, especially when judgment is impaired.
- **15.** *If the PDD is HIV positive, refer him or her for medical treatment and counseling related to HIV disease. PDD who are HIV positive face the risk of AIDS as well as the loss of friends, family, housing, insurance, employment, and so forth. PDD may be unaware of available medical treatment and supportive resources.
- **16.** Evaluation of nursing outcomes.

9. Conclusion

Quality of life of PDD is the indicator to illustrate the quality of nursing intervention outcomes. Detection of drug addiction is most effective when multiple types of assessment are used. A combination of interview, screening instruments, information from collateral sources, and laboratory tests such as urine test and drug screens should be used.

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The author has no conflicting interest to declare.

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