

**Systems Theory Application to a
Private Psychiatric Mental Health
Nurse Practitioner Practice**

By

Susan K. Varesko

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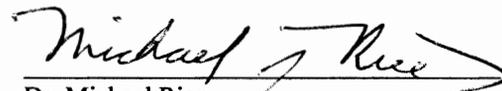
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To the Faculty of Washington State University:

The members of the Committee appointed to examine the clinical project of SUSAN KATHLEEN VARESKO find it satisfactory and recommend that it be accepted.


Dr. Rebecca Cardell, Chair


Dr. Michael Rice


Meg Jones, MN

Running head: SYSTEMS THEORY APPLICATION

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Susan K. Varesko
Washington State University**

Abstract

Advanced practice registered nurses specializing in psychiatric mental health (APRN-PMHs) practice with independent prescriptive authority in forty states (Kaas, M., Moller, M., Markley, J., Billings, C., Haber, J., Hamera, E., Leahy, L., Pagel, S., & Zimmerman, M., 2002). This autonomy provides opportunities for establishing private practices that are independent of physicians. A conceptual model is proposed for a private practice using a systems theory approach. The model reflects comprehensive and effective methods that provide solutions for potential and actual problems impacting a practice.

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Introduction

In 1973, Washington State enacted reimbursement legislation for advanced practice nurses (Sebastian, 1991). Because of this legislation, these nurses obtained direct reimbursement for their services and prescriptive privileges. With this autonomy, many advanced practice registered nurses specializing in psychiatric mental health (APRN-PMHs) established their own private practices. The exact number of nurses who own their own private practices is unknown. A study conducted in 1991 found that as many as 16% percent of 5,000 nurse practitioners (NPs) were practicing in independent settings (<http://www.pftweb.org/>). In Washington State alone, 155 APRN-PMHs are eligible to prescribe Schedule 5 drugs and 208 APRN-PMHs are eligible to prescribe Schedule 2-4 drugs (Personal communication with Valerie Zandell, Washington State Department of Health, Health Professions Quality Assurance Commission, October 21, 2003). The ANA web site reports over 140,000 advanced practice nurses (APNs) in the United States (<http://www.nursingworld.org/>).

This opportunity of independent practice presents some new challenges to advanced practice registered nurses working in the mental health field. Advanced practice nurses need to become familiar with business strategies and management techniques. Without this knowledge, some nurses may experience frustration and disappointment. Developing management and business skills can be very time-consuming for nurses and consequently may detract from time spent caring for patients. Problems such as these might be solved through the application of a framework to guide APRN-PMHs in establishing and managing the business aspects of their practices.

The framework of systems theory has been applied extensively to business organizations (Bertalanffy, 2001), but has not been applied to use of this framework in setting up a private psychiatric mental health practice. Additionally, the literature discussing the use of models to set up private nursing practices is sparse.

The purpose of this paper is to present a conceptual model that will handle the intricacies of building and managing a private practice. Systems theory is reviewed as a guide to the conceptual model,

which is designed for setting up, operating and analyzing a practice. Several case examples are presented as operational applications of the systems theory model.

Literature Review

Literature describing APRN-PMHs practices is limited (Puskar, 1996). The majority of the articles on private APRN-PMHs practices address collaboration with other health professionals (Kaas, 2000), autonomy (Cullen, 2000), and role development (Puskar, 1996; Spratlen, 1997; Cukr et al., 1998). Other articles discuss various facets of NP responsibilities (Bailey, 1996), research and clinical practice of advanced practice (Mason, 1997).

There are a series of resources, which outline the intricacies of establishing an APRN-PMHs private practice. Articles discuss topics such as the importance of understanding the risk involved (Lambert & Lambert, 1996), various considerations of establishing and operating such a practice (Moller, 1999), and a business structure of partnership, corporation, or sole proprietorship (Blair, 1997). Moller (1999) discusses specific components to consider when establishing a new psychiatric practice such as applying a “cents and sensibility” approach. (p. 122). Buppert (1999) provides a business practice and legal guidebook for NPs that describes challenges that may be encountered when establishing a private practice. The Association of Academic Health Centers trains nurse practitioners in building and managing private practices (<http://www.pftweb.org/>). However, these excellent and informative guides to establishing an independent practice provide no theoretical framework for an APRN-PMH in establishing such a practice.

Thrasher (2002) found the development and use of theoretical frameworks in nursing situations to be worthwhile. For example, chaos theory was found to be helpful in the area of knowledge generation when used in a NP practice (Lett, 2001). Lin (2002) found properties of various systems such as “mathematical approaches, information theory, cybernetics, game theory, decision theory, and so on” to be beneficial in organizational and social systems (p.1). Liu, Daum & Hallett (2002) believe systems theory may be useful in managing fluctuations in a variety of scientific disciplines. These studies support the idea that systems theory could easily be adapted to nursing situations. Feldman (1983) echoed similar themes of using systems when prioritizing various areas of nursing supervision.

Organizations adapt systems theory to increase productivity (Jaski & Verre, 1981; Koerner, 1996; Walls & McDaniel, 1999). This theory is particularly useful in shaping and influencing nursing processes such as in counseling families (Conn, 1990) and in guiding businesses to achieve better outcomes (Bertalanffy, 2001).

According to Laddy and Kepper (1988), theories analyze facts as they relate to each other, whereas a theoretical framework classifies and organizes data in a logical manner. In summary, no theoretical underpinnings in establishing or managing any type of NP or medical practice exist in the literature. The use of an appropriately designed conceptual model is an excellent guide for APRN-PMHs when managing the complexities of a private practice.

Systems Theory

Systems theory is based on the idea that a system is part of a complex and unified whole that has a specific purpose (Kim, 1999). The interconnected and interrelated parts of the whole system build a framework. These connected parts, known as subsystems, are within the system itself and also within the environment where other interactions take place. All subsystems must be balanced in order to achieve equilibrium. Each affects the performance of the system. Stability is maintained through feedback, in order to establish equilibrium (Kim, 1999).

Viewing the system as a whole can help identify disequilibrium within the framework of the system. When taken apart, the system loses its equilibrium because subsystems are dependent on one another. It is possible to work within this framework in order to reestablish equilibrium. Because each practice is specific to the APRN-PMH, a model allows each APRN-PMH to design their own practice framework to meet individual needs.

The following model identifies the process of setting up and managing an APRN-PMH private practice. Specific components of the private practice are applied to the model in order to explain how the framework of systems theory can be effective in guiding APRN-PMHs through starting and running their practices.

Applying Systems Theory to a Conceptual Model

The core of the model is comprised of the APRN-PMH, client, and the facility. This core interacts with the subsystems of the environment. These subsystems include professionals, reimbursements, and

operational components. The model depicts a private practice in constant motion (Figure 1). The specific elements of this practice and the environment are identified, and give a view of how the practice is changing and interacting with other parts of the system. Elements in the practice core are compared to each other and with elements in the outer environment to identify problems within the framework of the model. Any imbalances will lead to development of strategies to solve problems and reestablish equilibrium within the model.

Each individual practice will have its own unique interrelated parts. A practice should have a purpose that is defined as a mission statement. The purpose is for interdependent relationships to form between subsystems of the practice in order to achieve specific goals. Outcomes of a practice will depend largely on the APRN-PMHs ability to manage relationships in a professional and caring way.

Figure 1 here – The Practice Model

Application of the Practice Model

Each factor of the practice model is dependent on at least one other factor. Both the core practice and outer environment interact within their own sections of the model and with each other. Arrows in the model explain the direction of influence between each part of framework. Every part has the ability to effect outcomes of the practice.

The model is based on systems theory to represent a whole practice and all the interdependent entities that work together to make the practice a functional system. Problems in the system can be identified through inputs and outputs at weakest links in the model. They will guide to strategies, which can be designed and implemented to affect change over time.

The following approach can be valuable in solving potential problems of a practice and include five easy steps (Anderson & Johnson, 1997; Haines, 1998; O'Connor & McDermott, 1997; Richmond, 2000).

- Step 1 is to identify the problem in the system by looking at repeated patterns or trends. Good listening, questioning, and learning skills will make it possible to ascertain what is happening in the various entities of the model (e.g., human, physical, financial, and informational).

- Step 2 involves observing past trends of instability in the system. One must focus on the problem to understand what is happening and determine the number of changes required in achieving the goal.
- Step 3 involves dynamic strategy for solving the problem. Knowledge about all the aspects of the practice is part of planning a strategy and helps identify the correct changes to the structure. Remember that there may be a variety of ways to achieve the same outcome, and some solutions work better than others do.
- Step 4 puts the strategy/strategies into action and the change is entered as an input or output. It will then reenter the model framework to influence another part(s) of the system. The implemented change should balance the system to achieve equilibrium and dampen any negative effects in the practice. Realistic expectations are required when working within the model. The APRN-PMH must be patient and tenacious since plans will not always result in immediate change.
- Step 5 evaluates the outcome of action by questioning cause and effect. One way this can be done is through checking data or measuring results before and after the action.

If each action is based on the goal of supporting a patient in the best way possible, the APRN-PMH will be establishing a trusting relationship with her clients. One effective evaluation tool of this relationship is a comment form provided for patients regarding service satisfaction or dissatisfaction. Allowing for different perspectives of objectivity and subjectivity results in wider learning and allows the practice to flourish. As the system of an APRN-PMH practice is developed and managed appropriately, the success of the practice will be evidence by the strong relationships that have been established and maintained. Various tools or efficacy measurements should be considered as a way of gaining insight into the dynamics of the practice. Strengths or weaknesses of relationships in the APRN-PMH private practice are evaluated by measuring outcomes.

Not every strategy will get the desired effect. If the first strategy does not work, the APRN-PMH must evaluate new strategies of the subsystems and try again. Since problems or discrepancies will never cease to exist, Step 5 includes continual evaluation of the model. As problems remain or new ones are

identified, continue with Steps 1-5 to achieve the desired solutions (Anderson & Johnson, 1977; Haines, 1998; O'Connor & McDermott, 1997; Richmond, 2000).

An APRN-PMH will encounter obstacles that often can not be anticipated. As the owner grows accustomed to manipulating the framework of the practice to specific needs, he/she will be able to identify the source of problems and solve them. Through implementing these five easy steps, the process should simplify over time.

The Practice Core

APRN-PMH. Numerous characteristics that sustain the system of an APRN-PMH private practice include examples such as the personal attributes, philosophy, vision, and mission statement of the APRN-PMH. The APRN-PMH brings with him/her a scope of practice, standards, and clinical guidelines. In order to practice at an advanced level, the nurse requires licensing, certification, accreditation and malpractice insurance.

Characteristics such as flexibility and balance are required for the well being of the professional identity of the APRN-PMH and to promote the practice. One such inconsistency would occur if the APRN-PMH did not keep current in his/her specialty. It is vital that APRN-PMHs keep current with the most recent training and skills and that they know how to deal with personal changes. Without updated skills, patients would be denied the most recent scientifically proven treatments and perhaps experience unnecessary side effects of out dated medications.

Keeping abreast of current trends helps the APRN-PMH separate the relevant from extraneous information and reduce uncertainty. As the APRN-PMH reviews the model, consideration of personal attributes must be considered and evaluated to allow for needed self-improvement. The APRN-PMH will benefit from performing a self-appraisal that considers his/her own motivation, work satisfaction, and skill or ability to attract patients (Hodge et al., 2003). The best appraisal will result in an APRN-PMH who has a good self-esteem and self-confidence, which will lead to flexibility and patience when evaluating the structure of the model. In using this method, APRN-PMHs have a way of evaluating themselves in an efficient manner, which leads to actions that will result in satisfactory outcomes for patients.

Client. Holistic domains of each client will determine the specific needs required in achieving satisfaction. Clients are influenced by perceptions of things such as personal needs, past experiences,

support systems, and the actual care provided. They bring specific cultures, ideas, beliefs and values that influence interpretation about the care they receive. Prior interactions from society influence expectations of care.

Interactions with relatives, media, and religious or other factions influence these perceptions and how the patient responds to treatments. Getting to know each patient well by taking an appropriate history and performing an appropriate assessment will lead the APRN-PMH to an effective treatment. When care is individualized and extended with compassion, clients are more likely to be satisfied with their treatment and outcomes.

The APRN-PMH supports the client through the difficult times by creating solution-focused goals agreeable to both parties, thereby promoting health of the client and equilibrium of the model through a growing relationship. Patients will be more likely to believe their investment in the APRN-PMH was warranted if their needs have been met.

As positive regard and support is extended to clients they learn to trust APRN-PMHs. Patients have a view of what their personal mental health or illness means. They have a mental image of the kind of care they wish to receive and with that come rights to confidentiality, privacy, and safety. If a patient has a complaint, it should be documented and addressed in an expedient manner. When patient care results in good outcomes they return for services and make recommendations to others, thereby promoting the prosperity of the practice. The actual number of clients regulate business workload and revenues, thereby determining the success or failure of the practice. "A successful APN develops, implements, and evaluate both patient care and indirect processes that support it by organizing these tasks as a system" (Hodge, Anthony, & Gales, 2003, p.633). When the APRN-PMH uses a supportive and therapeutic relationship while providing excellent care, the client receives the quality of services they desire. This relationship between the APRN-PMH and the client promotes patient mental health and satisfaction.

Facility. The facility consists of the building, contents, and required staff. A therapeutic milieu, adequate supplies and professional staff enhance this section of the model. All staff functions have a positive or negative impact on the practice. Impacts on the practice are continually assessed in order to recognize imbalances requiring interventions that result in success. The physical environment of the practice includes the office setting and functionality. It reflects the attitudes, philosophy of care, and

beliefs of the client. For example, a therapeutic climate is needed where patients feel comfortable in the peaceful, warm and accepting environment that is provided. A physical office that caters to these needs makes a good first impression on the client. When the office is arranged to provide efficient services, additional time will be available for client needs and reflects the APRN-PMHs philosophy in showing a high regard toward the patient. Extra consideration of the practice décor and a positive attitude displayed by the staff will go a long way in patient satisfaction.

Running a private practice facility involves constant scanning of boundaries within the model and comparing various interactions. If a problem arises in the practice, this is an indication for looking at the model and evaluating each section to see where the inconsistency might exist. The most obvious problem is always dealt with first. As the APRN-PMH manages relationships with the staff, a shared philosophy of care is emphasized that supports goals of the practice.

Case Example 1: For example, consider a practice where the APRN-PMH noticed that her clients were not returning for care when she felt she was connecting well with them and fulfilling their needs. After reviewing the situation with the patients she found that personnel at the front desk were being short and abrupt with the clients. The APRN-PMH would have to address the situation with the employee and possibly give specific training on what was expected in personnel/client interactions. Included in the training would be the reiteration of the philosophy of the practice and an explanation of how that philosophy might be used to redirect their behavior. The problem would have to be resolved by interacting appropriately with the clients, or a change in staff would be necessary if the situation did not improve after appropriate intervention and teaching.

The Outer Environmental Circle

The environment is the outer circle of the practice model (Figure 1) and is comprised of a myriad of possible interrelated parts. These parts interact with each other within the environment and also relate to entities within the practice core, which includes the APRN-PMH, client, and practice. Relationships within the system of a practice and its environment are interrelated. The power of relationships may be shared in order to achieve balance. Because the environment is complex and always experiencing change, the mental health practice will face uncertainty. Armed with knowledge, the APRN-PMH can tackle problems stemming from the environment and know how to deal with pressure changes. Components of the

environment have been grouped into three simple categories of professionals, operational components, and reimbursements too illustrate how these subsystems connect to all parts of the private practice.

Referrals/Liaisons/Professionals: One of the categories of the environment is referrals, liaisons, and other professionals. Referrals or liaisons include participants such as physicians, APRN-PMHs, and physician assistants. Other professionals working with the APRN-PMH to improve a patient's condition might consist of counselors, pharmacists, dieticians, hospitals, legal entities, and lending institutions. All of these contacts play a part in supporting the practice. Each participant in this section of the environment interacts within the framework of the system and influences other participants, components of the environment, or the practice. The APRN-PMH depends on these other participants in the environment to secure the best care possible for his/her client. As collaborative, interdisciplinary relationships are formed with other professionals, referrals increase and patients find they have numerous support systems available to them.

It will be necessary for the APRN-PMH to use historical data in order to predict future trends of a stable environment by assessing all possible liaisons, referrals, or professionals periodically. By using specific strategies that target desired outcomes, the APRN-PMH achieves symmetry of the model and a successful practice supported by established relationships.

Operational Components. This part of the model (Figure 1) consists of overall costs that exist within the environment and the practice. Examples are costs in the building, equipment and repair, furniture, supplies, magazines, teaching materials, and utilities. Other costs are phone and answering services, insurance, chart and business forms, marketing and advertising, personnel/office staff, billing costs, taxes, cleaning and maintenance. Spending too much or little in any one area will have an impact on the overall practice as noted in a systems model. One of the greatest challenges may be acquiring funding or resources available for establishing a new practice. This is where a good relationship with a lending institution will benefit the APRN-PMH. Good preparation and management minimizes costs and maximizes revenues, thereby, ensuring a functional profit. Part of that good management involves a constant scanning of subsystems and comparing various entities of the practice.

Case Example 2: Consider a new practice that is being developed by an APRN-PMH graduate. Initially, the APRN-PMH must decide on a specific budget for marketing and building relationships outside

the practice. An excellent way to introduce the APRN-PMH, that is also affordable, is through informative brochures. The brochures could explain services made available by the APRN-PMH. The APRN-PMH might also consider sending letters, having an open house, or even placing an advertisement in the newspaper. After estimating costs and considering the allotted budget for each marketing idea, the APRN-PMH may only have funds for the brochures and decide to inquire about placing a free newspaper article to introduce him/herself to the community.

Staying within the budget maintains equilibrium in the new practice. As the APRN-PMH works through various aspects of starting and running a practice they will need to make the necessary changes to maintain equilibrium in the model. When finances of a new practice bring challenges, it might mean cutting the allocated budget in various subsystems in order to achieve equilibrium in other sections of the model. The ability to be flexible and innovative is needed in the systems thinking approach.

Reimbursements. A vital role of the practice is the business of reimbursements. It includes money received for services rendered and comes from entities such as private pay, private insurance, third party reimbursement, Medicare, Medicaid, HMOs, private contracts and other sources of income from the environment. Since some reimbursements are more lucrative than others, it is important to maintain a proper equilibrium. Maintaining the equilibrium might entail negotiating better contracts with various insurance carriers. It also may mean limiting patients that carry poor insurance coverage, or patients with no insurance coverage that are unable to pay cash up front for care. Low-cost agencies would have to be identified in order to refer clients with limited resources for needed services. Discussion of charges, billing practices and collection should be discussed during the first session in order to give the client an opportunity to decide the best route to receive care. Policies and payment requirements are under constant change.

APRN-PMHs have an ethical responsibility to help their clients get care, but no one will receive care if poor revenues cause a practice to fail. Profit is the driving force of all businesses and a private APRN-PMH practice is a business. The business goals of the APRN-PMH are specific and will enhance their quality of life. An APRN-PMH must be innovative in order to meet the demands of changing services, outputs, and also balance cost of quality with waste and inefficiency in the environment.

This is where scanning of the practice and environment to identify inconsistencies becomes critical to maintain equilibrium, thus securing the best quality of life possible for the APRN-PMH. As an APRN-PMH gets better at manipulating the model, he/she will see that their ability to manage relationships with billing personnel and other contacts will grow. Contracts will be easier to negotiate and relationships with low-income clinics will result in client needs being met.

Case Example 3: Consider a state that may have been going through tremendous changes in health care payment policies and regulations. Certain medications may be approved for reimbursement by the state for a specific time and then policy will be changed and reimbursement from these same medications might be denied. In order to obtain the medications that certain clients need, it is important to know what the state will pay for and what it will deny on a consistent basis.

Additional problems can be found when companies are mandated to adhere to new billing laws or policies. State or Federal mandates are not always computer friendly. Concern over whether the computers would be able to meet the new requirements is real and it may result in huge delays of payments. A once lucrative and secure business could be in jeopardy due to financial delays and uncertainty if they have not prepared in advance by securing a substantial reserve of money to cover the unexpected.

Implications for Research

In order to test and prove the scientific validity of this conceptual model, more research and field-testing must be done. Research projects would have to include personal interviews with APRN-PMHs to determine the effectiveness of the model. A study should be developed to identify perceptions of model success using either qualitative or quantitative data. The findings will enhance understanding of the various complexities of managing and influencing decisions in a private practice. Future studies might include comparative groups, one using the model and the other not using it. Effects of interventions within the framework and performance of the model should be evaluated because each practice is a specific entity.

A limitation of this model is its inability to include all facets of each individual private practice. Future investigators need to utilize the model to support the validity of structure, mechanisms of action, framework, and reliability while developing any new appropriate strategies. Extended findings would include philosophical reasoning and nursing theory to direct further use of the model in an area where much research remains to be done. Hopefully these findings will substantiate the validity of using the model.

Conclusion

The proposed conceptual model in this nursing research paper is theory based and appears to provide an explanation for the majority of factors related to the science of an APRN-PMH private practice. This study provides a useful conceptual framework when viewed from a systems theory perspective. The model is not intended to inhibit creativity and confine APRN-PMHs to a fixed model, but to guide them in personalizing their own practices in a structured way. This should help them realize a maximum potential in their own private practices. As use of the model is systematically assessed, it may be concluded that it proves to be a viable option to assist APRN-PMHs in other fields outside the APRN-PMH specialty in running their practices more efficiently. It is hoped that scholarly discussion and debate of this model will advance the science of nursing and the practice protocols based on its conceptual framework.

Nurses must have strong business skills and relationships since business plays an important role in client and staff satisfaction. This conceptual model links a private practice to the desired outcomes of satisfaction and financial stability. Moreover, it provides the reasonable tools for developing a successful practice based on a rational approach and experience.

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Figure 1. **Practice Model**

