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A Developmental Disabilities Program: A Proposed Education Program for Direct Support Professionals

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This is to certify that the doctoral study by

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MSN, Benedictine University, 2010

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Abstract

Nurses can play integral role in collaborating with community leaders and identifying health promotion strategies, such as physical activity and nutrition classes, for people with developmental disabilities (DD). This study identified a role that nurses can establish among Direct Support Professionals (DSPs) who serve important functions in the daily supervision and care of clients with DD. The data reviews from the archival results from Association of Individual Development Health Matters Assessment Reports in August 2012 and September 2013 indicated DSPs' need for further training in their roles as health instructors. The Health Matters Assessment Report in 2012 indicated low scores in employees' confidence in terms of planning health education classes (20.8%), running a health promotion program (22.7%), evaluating health functions and behavior for people with DD (19.3%), teaching clients with DD how to exercise (26.7%), and making healthy food choices (25%). The Health Matters Assessment Report in 2013 indicated poor attendance to Health Matters Class training (20%) and reduced attendance to Health Matters Class launch events (34%). This study proposed a Train-the-Trainer education program to help DSPs prepare as health instructors of Health Matters Class. The education program can establish effective partnerships between nurses and can promote peer-to-peer support while increasing DSPs' knowledge, skills, and commitment as health instructors. This study can benefit nurses, researchers, and community workers involved in providing care to clients with DD. The findings of this study can provide direction for further research in the advocacies of health promotion programs among clients with DD in the community.

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Dedication

To the clients of the Association for Individual Development (AID), I dedicate this project as part of my advocacy on the importance of providing health promotion programs among people with developmental disabilities in the community. The engagement of clients with physical activity and healthy food choices will bring forth health and wellness despite their limitations.

Acknowledgments

I would like to share this success with my mother, who has been there for me and believes that I can create a difference in my profession. To my late father, who valued education and its influence in one's life and who taught me to take pride in what I do and to give back the fruits of my success to others. I also want to share this hard work with Patricia Lopez, who has been there to keep up with me and encourage me that faith will carve my success. To my sisters, Rowena and Gemma, who are always proud of their "little sister." Lastly, I am extending my deepest appreciation to Dr. Andrea Jennings-Sanders, my program chair, and Sue Quillin, RN, my preceptor, who patiently guided me. They made me realize that patience and optimism are the keys to success in my DNP program.

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Section 1: Overview of the Evidence-Based Project

Introduction

Public health nursing is a specialty that focuses on addressing the overall health concerns of all members of the population (Stanhope & Lancaster, 2008). The improvement of available healthcare services is strongly influenced by nurses' roles, which have evolved into various areas. These include clinical practice, consultation, follow-up, treatment, patient education, and prevention of illness. Nurses work from holistic and patient-oriented programs with patients in the community (Kemmpainen et al., 2012). Nurses practicing in community-based settings can enhance empowerment and collaboration with community leaders and other providers in the identification of health promotion and disease prevention programs needed by their respective population.

Historically, direct support professionals (DSPs) have been responsible for providing basic-needs assistance to clients with developmental disabilities (DD) living in the community. DSPs are considered the "eyes and ears" of the nursing staff (Rehabilitation Research and Training Center on Aging with Developmental Disabilities Lifespan Health and Function, n.d.). They provide regular monitoring of clients with DD 24 hours a day. Their tasks include providing assistance with personal care, providing safe and clean facility and administration of medications (Marks, Sisirak, & Chang, 2012).

The increasing onset of chronic conditions among people with DD has resulted in the expansion of DSPs' roles to include health promotion activities. Challenges related to this trend include DSPs' preparation to assume these roles and to become partners with

other providers in the delivery of health and wellness to clients with DD. The limited health promotion training within community-based organizations continues to make DSPs unable to incorporate health and wellness activities into their daily tasks (Marks, Sisirak, & Hsieh, 2008).

Nurses can play an integral role in providing assistance to DSPs in health promotion activities. Nurses can use the nursing process at all levels of collaboration among DSPs in their new roles as health instructors in health promotion programs. Nurses can assess DSPs' knowledge about health promotion among people with DD, meet with DSPs and identify their learning needs and teaching strategies, and finally, propose an education program that DSPs can use as instructors of a "Health Matters Class."

The Association for Individual Development (AID), an organization that provides services to individuals with developmental, physical, and/or mental disabilities in Aurora, Illinois, has adapted an evidence-based health promotion program called Health Matters Class. The organization currently serves more than 5,200 clients in 20 programs operating in 34 communities (Illinois Department of Health Services, n.d.). The Health Matters Class uses the Health Matters Exercise and Nutrition Curriculum for People with Developmental Disabilities (Marks et al., 2010), which guides community-based organizations (CBOs) on how to start and implement a 12-week physical activity and health education program.

It has been shown that collaboration between DSPs and nurses has been effective in providing coordinated services to individuals with DD. Increasing this collaboration by

providing additional services through the use of DSPs would provide cost-effective services offering additional support to patients with DD. This increased collaboration would focus on the delivery of a health promotion program led out by DSPs under the supervision and training provided by nurses. It is important to identify the needs of DSPs in order to determine their level of preparedness for such a program. The identification of DSPs' preparedness will help nurses provide the appropriate training that they need. DSPs must first be aware of their roles as health instructors. This may include having knowledge of the health promotion program. Learning the components of the Health Matters Class can help DSPs perform their roles, meet the goal of the organization to become health-oriented providers, and help their clients with DD improve their health through exercise and healthy food choices.

Problem Statement

The DSPs' role is essential and focuses on clients with DD across their life span. The patient care services of DSPs must be provided correctly and competently (Center for Disability Studies & Delaware Developmental Disabilities Council, 2007). The AID's initial plan was to assign a coordinator who would monitor the implementation of a Health Matters Class. The organization's limited funding prevented the appointment of an individual to this role. The absence of this role affected the supervision of DSPs as they initiated each round of the Health Matters Class. Untrained or undertrained DSPs may struggle to meet the needs of clients with DD. Lack of training can result in poorer health status among clients with DD if DSPs do not have adequate knowledge and commitment to teach health promotion programs (Marks et al., 2010).

The DSP staff members were assigned by program directors as health instructors of the Health Matters Class. Twenty-seven DSPs attended the first train-the-trainer workshop, and eight DSPs attended the second train-the-trainer workshop, as confirmed by the director of health services (S. Quillin, personal communication, August 5, 2013). Reduced attendance at the training was a concern of the organization. Possible reasons included lack of communication among program directors in making appropriate staffing coverage and information dissemination to staff.

Purpose Statement/Project Objectives

The purpose of this study is to assess the preparation of DSPs as appointed staff members of AID to teach a Health Matters Class.

There are two primary objectives of this study. The first objective is to evaluate the results from the Health Matters Assessment Report in 2012 (HMA) before the implementation of the Health Matters Class as well as review the 2013 Health Matters Assessment (HMA) survey results following the first round of Health Matters Class. This review will help to assess the level of preparedness among DSPs as instructors of the Health Matters Class. The second objective is to develop an education program for DSPs based on the review of the results of surveys from Health Matters Assessment information.

Research Study Questions

This study seeks to answer the following questions:

1. What are the needs of direct support staff as newly appointed health instructors of a health promotion initiative among clients with developmental

disabilities?

2. What is the nurses' role in helping direct support staff prepare as instructors of Health Matters Class for clients with DD in the community?

DSPs at AID attended a 1-day train-the-trainer workshop to help them prepare and be certified as health instructors of the physical activity and health education program. The workshop aimed to help DSPs start the health promotion program, teach their clients with DD how to increase physical activity and healthy food choices, and support their clients in making long-term lifestyle changes (Health Matters Program, n.d.). The DSPs needed more than one workshop in order to build their confidence to teach the program and acquire the knowledge and skills required to teach the class.

A competency-based education program using the train-the-trainer model (TTT) will be developed that focuses on preparing DSPs in their roles as health instructors of the Health Matters Class. The TTT is an educational training model that organizations use to identify potential trainers with ties within their organization. The potential trainers will be provided with education, instructional materials, and program guidelines, which can assist them in training their peers (Orfally et al., 2005).

DSPs' knowledge of health and wellness can help them to identify the health risks of sedentary lifestyles among people with DD. Knowledge of the benefits of physical activity such as improving flexibility and endurance among people with DD is important. DSPs' ability to implement strategies to increase physical activities and healthy food choices may help to improve participation among clients with DD. Lastly, DSPs' commitment to teach the program can be achieved if peer-to-peer mentoring is

introduced. This may allow DSPs to experience a role as participants in the health promotion program before becoming effective health instructors.

Significance/Relevance to Practice

Healthy People 2020 is committed to the vision of "making citizens live long and healthy lives" (Centers for Disease Control and Prevention [CDC], 2012a, p. 2. Its mission is to identify nationwide health improvement priorities including physical activity, health, and disability. It aims to change people's views of health through collaboration and innovative thinking on health promotion and disease prevention.

The barriers to teaching health promotion programs should be clearly identified during the program planning process. Most professionals caring for clients with disabilities lack knowledge of how to communicate and help them meet their specialized wellness goals (Thierry & Cyril, 2004). An increased focus on health promotion programs and preventive care approaches may result in the reduction of primary care provider visits, minimize the overuse of hospital visits, and reduce the rates of hospitalizations (Marks, Sisirak & Chang, 2012). It is important that DSPs develop a collective efficacy that can build a common voice, empower their abilities, and improve their skills in educating their clients to be physically active and eat healthy. Stanish and Frey (2008) conducted reviews on strategies that have been used in promoting physical activity among people with intellectual disabilities (ID) and DD. The study found evidence that individuals engage in and adhere to physical activity if there is an opportunity to do so and that motivation plays a major role in modifying health behaviors among people with DD.

Evidence-Based Significance of the Project

Rosswurm and Larrabee's evidence-base practice model (1999) identifies the importance of linking a problem to possible interventions and outcomes. This is the second step in drawing for practice change. The program planning process involves a thorough assessment of the organization's needs and mobilization of resources needed to successfully implement a health promotion program.

Hewitt and Larson (1994) summarized three studies on training direct service personnel working in community and residential houses for persons with developmental disabilities at the University of Minnesota's Research and Training Center on Residential Services and Community Living. The three studies focused on the importance of competency-based training among direct service personnel. The common emphasis of these three studies is the importance of effective training strategies. The first recommendation addressed comprehensiveness as an important component of training. Second, variations of instructional materials should be in accordance with participants' age and previous work experiences, formal education, and training. Third, one-to-one instruction must be integrated that includes practice and immediate feedback. Finally, integration of core competencies must involve training components such as management of clients' behavior, community engagement of patients, and basic medical and healthcare issues.

The National Council on Disability (NCD; 2009) identified the lack of training on disability competencies among healthcare professionals as a significant barrier to their ability to provide appropriate and effective healthcare. Macbeth (2011) identified that

many DSPs are working with less immediate supervision. Most DSPs work on extended hours such as 3-day tours of duty; hence, the traditional classroom setting is difficult to arrange. The use of Internet-based training has been a substitute teaching strategy but has offered inadequate evidence of learning among DSPs. The completion of required online learning activities does not guarantee acquisition of knowledge and skills among DSPs. It is still important to evaluate learning by conducting face-to-face interactions with staff (Macbeth, 2011).

Implications for Social Change in Practice

A vital part of nursing is health education in any healthcare setting. This includes: promotion, maintenance, and restoration of health. It is important that clients in any health setting can receive practical understanding of health-related information. People learn effectively if there is active involvement in the learning process (Stanhope & Lancaster, 2008).

Nurses have abundant opportunities to participate in community-wide health care. Community-oriented nursing emphasizes partnerships between individuals, families, groups and communities to promote health. In order to promote active partnerships, community members should be more involved in every step of assessment, planning, implementation, and evaluation of needed change. The Health Matters Class implemented by AID is an opportunity for nurses to establish partnerships with AID leaders and staff members. As this is an initial move by AID to promote health and wellness to their clients with DD, nurses can play an integral role in enhancing the preparation of DSPs to teach a health promotion program.

Kemppainen,Tossavainen, & Turunen (2012) identified community orientation as one of nurses' public health roles. This includes working collaboratively with other professionals in the community. The community orientation approach also includes establishing an aim to create change in patients' behaviors through health promotion activities.

The current economic downturn has pushed community organizations to cut costs. Training has been one of the first areas of budget reduction in order to save resources. The reduction of training may create negative effects among DSPs; they may feel devalued and may also suffer low morale (Hewitt & Lakin, 2001). The clients for whom they provide their services may also feel vulnerable and less safe because of a lack of competence in their care providers (Macbeth, 2011). The AID initially planned to appoint a coordinator of the Health Matters Class to consistently monitor its progress and report to leadership concerns that need to be addressed. The AID is no exception to budget constraints and could not employ a Health Matters Class coordinator.

This project has the opportunity to assist AID in determining the progress of the Health Matters Class by evaluating DSPs' capacity as health instructors. The AID's inability to appoint a coordinator of the Health Matters Class should not serve as a barrier to its aim of successfully implementing the program. The use of contingency plans when funding is limited should be integrated into the program planning process.

The National Alliance for Direct Support Professionals (NADSP) advocates for strengthening the direct support workforce. It is important to provide DSPs with high-quality educational experiences such as in-service training and continuing education that

will enhance their competency. The NADSP strongly asserts that DSPs' status should not be viewed as merely an "entry-level job but as a career" (Macbeth, 2011, p. 4).

This project can open the door for more active partnerships between nurses and DSPs in the achievement of successful implementation of every round of Health Matters Class at AID. The nurses' interdisciplinary collaboration with AID leaders and DSPs can influence mobilization of resources including training and supervision. An education program may be an important resource in effectively training DSPs as health instructors.

Definition of Terms

Association for Individual Development (AID): A community-based organization-serving adults with intellectual/developmental disabilities located in Aurora, Illinois.

Community Academic Partnerships (CAP): A group of community-based organizations serving patients with developmental disabilities. It is composed of health experts who provide training and supervision among its affiliates in implementing the Health Matters Class.

Developmental disabilities (DD): A group of conditions due to impairment in physical, learning, and behavioral areas.

Direct support staff (DSP): Entry-level staff trained to provide patient care for people with developmental disabilities.

Direct support workers (DSW): Term used by other community-based organizations; synonymous with *direct support staff*.

Exercise and Nutrition Health Education Curriculum: A course of learning based on the successful outcomes of the Innovative Health Promotion Program for Adults With

Developmental Disabilities at the University of Illinois, Chicago. This comprises a 12-week exercise program that includes exercise, nutrition, and health education components.

Health Matters Assessment (HMA) Survey: Online survey conducted by Cornell University in collaboration with CAP. This survey aims to assess the needs and capacity of CAP affiliates in initiating and implementing a Health Matters Class in their community-based organizations.

Health Matters Assessment of Capacity (HMAC): A survey that addresses the capacity of direct support staff in terms of providing a health education and nutrition class to clients with DD.

Health Matters Class: An activity initiated at AID that is based on an innovative 5-year evidence-based community program for people with DD conducted at the University of Illinois, Chicago. It includes a 12-week physical activity and health education class among clients of AID.

Health promotion: The process of enabling people to take control over and to improve their health.

Physical activity: An activity involving various movements of the body geared to improve health through the investment of energy in meaningful movements at a given time of the day.

Preparedness: Acquisition of knowledge, skills, available resources, and commitment to perform an assigned role.

Secondary conditions: Medical conditions found in people with DD including

osteoporosis; osteoarthritis; decreased balance, strength, endurance, fitness, and flexibility; increased spasticity; weight problems; and depression.

Stakeholder: A person, group, organization, or system that affects or can be affected by an organization's actions.

Train-the-trainer model: Widely acknowledged educational model in which an organization identifies potential trainers with ties to the organization. The trainers are provided with education, instructional, and program guidelines, which will enable them to teach their peers.

Wellness Committee: Group leaders at AID who take charge in planning, launching, implementing, and evaluating the status of the Health Matters Class. It is presided over by the director of health services.

Assumptions and Limitations

The Health Matters Class is an ongoing health promotion program at AID, where DSPs conduct 12 weeks of health education and nutrition programming. This study has several limitations. First, it will not be possible to observe ongoing rounds of Health Matters Class due to time constraints. Observation of Health Matters Class sessions can provide an opportunity to identify teaching strategies among DSPs, determine their knowledge and confidence in teaching the class, and identify clients' participation in both discussions and exercise activities. Clients' participation may reflect their degree of understanding of an interest in the health initiative.

Additionally, this study will have limited generalizability due to the small sample of DSPs who participated on both Health Matters Assessment surveys. Staff members

may also feel obliged to provide positive feedback on the survey as opposed to their perceived actual experiences. This may be related to the expectations from leadership that they are supposed to complete the class with positive outcomes and that a positive outcome signifies good performance.

This study used secondary analysis, which allowed for the review of previously collected data (i.e., archival data results). The survey results provided limited information regarding the knowledge, skills, and confidence of DSPs to teach Health Matters Class. The surveys also contained data results that were not relevant to the purpose of this study.

Summary

The implementation of a health promotion program among community-based organizations can pose challenges that call for a collaborative effort among stakeholders. The stakeholders in this case include leadership at AID, staff members, community partners and leaders, and clients with DD. The AID has initiated an important strategy by becoming an affiliate of CAP, which can provide support and direction in its initiation of an evidence-based health promotion program.

This study emphasizes the nurses' role in the community and the importance of establishing active partnerships among community leaders and staff members. These active partnerships may provide further support among DSPs by proposing an education program to improve their knowledge, skills, and commitment as instructors of Health Matters Class. The train-the-trainer model that will be used in building an education program will focus on peer-to-peer mentoring. DSPs will have the opportunity to be

trained by their peers and experience the role of participants in the class before becoming health instructors.

Section 2: Review of Scholarly Evidence and Conceptual Framework

Rosswurm and Larrabee's (1999) third step in their evidence-based practice model includes the synthesis of evidence. Section 2 of this study addresses the review of evidence supporting ongoing advocacy to improve the training and supervision of DSPs working with clients with DD in the community. A comprehensive literature review was conducted encompassing resources from the last 10 years.

Health promotion and health education define important strategies to promote wellness and people's engagement in healthcare. The World Health Organization (WHO) has defined *health promotion* as "enabling people to increase control over and to improve their health" (WHO, 2003, p., 1). *Health education*, on the other hand, has been defined as the "combination of learning experiences designed to help individuals and communities improve their health, by increasing their knowledge or influencing others" (WHO, 2003, p., 2). Health promotion enhances quality of life among people, yet barriers can cause significant impact on individuals' health and wellness. Perceived barriers to health promotion can include personal factors such as income and education and environmental factors such as school, work, family, and friends (Gatewood et al., 2008). Behavior change is a critical aspect of health promotion and health education. Self-efficacy is an important component of behavior change. It can predict whether behavior change will occur and how long behavior change will last (Gatewood et al., 2008).

Specific Literature

The Health Matters Community Academic Partnership (CAP) is collaboration between the University of Illinois, Chicago and two community-based organizations: ARCA in New Mexico and North Pointe Resources in Illinois. The organization supports the development, implementation, and evaluation of health promotion and disease prevention for people with DD. The organization provides various community-based activities for health professionals, and persons with disabilities. These include health matters, health messages, signs and symptoms, and health advocacy programs. Resources can help connect local communities in cooperative experiences, which can promote health and wellness for people with DD (Health Matters Program, n.d.).

Lack of training and education is one of the identified barriers in addressing the challenges among community workers caring for people with DD (National Council on Disability, 2009). The University of Illinois, Chicago examined the Health Matters train-the-trainer program in terms of the efficacy of a staff-led exercise and health education program. There were 34 staff working in community-based organizations (CBOs) who completed the 8-hour Health Matters Class training. There were 67 participants with intellectual disabilities (ID) 30 years of age or older who were randomized into an intervention group to have the 12-week exercise and health education program or a control group (n = 32 in intervention group; n = 35 in control group). The members of the intervention group showed improvement in their health status, knowledge, and efficacy, as well as fitness (Mark, Sisirak & Chang, 2012).

Cook (2009) conducted an investigation of DSPs' knowledge of instructional

strategies for people with developmental disabilities. The purpose of this study was to promote responsibility among residential agencies to train direct care staff in using effective teaching strategies in order to comply with the Medicaid Home and Community Based Services Waiver (HCBS). The study used a random sample composed of 294 direct care staff members working in 55 different group homes in the state of Florida. The study found that direct care staff did not fully demonstrate knowledge of effective teaching strategies. This was based on the direct care staff's overall score on the knowledge of effective teaching strategies quiz: 23.41 out of 50 questions (Cook, 2009).

A comprehensive evaluation of Minnesota Home and Community Based Services (HCBS,Hewitt, Larson & Lakin, 2000) was conducted that involved 372 face-to-face interviews, six focus group interviews with stakeholders, telephone interviews with 21 local HCBS administrators, 183 written surveys from family members of HCBS, and 468 surveys from case managers. One of the key findings indicated that 75% of all organizations reported significant problems in searching for qualified direct support staff (Hewitt, Larson, & Lakin, 2000). The lack of qualified DSPs affected the family's ability to find extended support in caring for a family member with DD.

General Literature

The National Council on Disability (NCD) defined *direct support workers* (DSWs) as "the backbone of long-term care" (National Disability Council, 2009, p. 20). Direct support staff provide assistance in the daily lives of people with DD such as the provision of personal care, socialization, leisure, decisions regarding care, and promotion of independence. The Department of Health and Human Services predicted that by 2020,

the demand for DSWs would rise to about 1.2 million full-term employees (FTEs) who can provide patient care services to an estimated 1.4 million individuals with ID/DD (Macbeth, 2011). It is important to prepare DSWs for this anticipated need and train them to be knowledgeable, skillful, and compassionate in performing their roles in the community.

The Health Matters CAP provided training to health workers in 18 states, which resulted in certification of 1,400 instructors in over 50 community-based organizations serving clients with DD (Heath Matters CAP, n.d.). Marks and colleagues (2008) emphasized that certification is not sufficient to determine DSPs' qualification to teach. It is important to provide follow-up training in order to increase DSPs' understanding of the learning capacities of people with DD.

Direct care worker (DCW) training was evaluated in Pennsylvania in order to determine providers' competence in caring for people with developmental disabilities (Mabry et al., 2010). The evaluation addressed the comparison of Pennsylvania regulations for DCW staff training with those of other states and analysis of the current DCW training for both rural and nonrural areas in Pennsylvania. The regulations for DCW training were comparable to those of other states in terms of content, frequency, and duration. The challenges identified included "lack of resources such as time, funding, scheduling flexibility and access to quality affordable materials" (Mabry et al., 2010, p. 1). The Pennsylvania training curriculum focused on content instead of discussions, interactions, and opportunities to reflect on knowledge and teaching skills. The common learning needs of DCWs include improvement in communication skills and

understanding clients' health problems and the implications of their care (Mabry et al., 2010). The train-the-trainer curriculum was recommended to increase DCWs' competence and to promote active collaboration among direct care workers.

An assessment of the status and skills of direct support staff in North Carolina was conducted in the form of a written survey and focus groups n =164 for administrators, n =223 for direct support personnel, and n =70 for family members). The key findings were as follows: significant turnover rates (41%) among direct support personnel due to inconsistent support and shortened training (25%), which comprised less than 8 hours prior to starting their job (Test, Solow, & Flowers, 1999).

In 2011, the Department of Labor (DOL) Competency Model recognized an online curriculum for DSPs called College of Direct Support (CDS) for Long-Term Care Supports Services. This was an affirmation that the competencies included in the curriculum are integral to the DSP workforce in providing support and services for people with DD living in the community (PR Newswire, US, 2011). The competencies found in CDS will provide DSPs with critical skills needed in the performance of their tasks and the provision of quality services to individuals with DD/ID.

A study was conducted to determine the influence of a training video as an empowerment tool to improve the attitude of DSPs about clients with DD/ID. Flatt-Fultz and Phillips (2012) randomly assigned two groups to determine if viewing a training video would change the attitude of DSPs. The study involved 43 DSPs; a control group completed the Community Living Attitude Scale (CLAS-MR) without the training video while the experimental group viewed a video on empowerment until after the completion

of CLAS-MR. The results indicated that the participants who watched the video had higher scores on the empowerment subscale of the CLAS-MR (mean = 60.04) compared to the group that did not view the video (mean = 33.22). Despite the small sample size of this study (n = 43), the findings were also consistent with past research such as Henry et al. (1996a), Llewellyn and Northway (2008), and Lord and Hutchinson (1993). The findings from these studies all supported the concept that people need to be mentored and supported through the process of empowerment, which will create significant effects in the services provided to clients with DD/ID.

Robson, Abraham, & Weiner (2010) conducted two studies to examine the influence of personality and cognitive abilities of DSPs as predictors of their job performance, satisfaction, and turnover. These studies support DSPs as vital members of the healthcare system and involved broad literature reviews on aspects of DSPs' personality and service orientation that correlate with successful performance of their roles. Robson et al's included Barrick and Mount (1991), Frei and McDaniel (1998) and Schmidt and Hunter (1998). The reviews identified potentially important personality dimensions in selecting DSPs and were also considered as concurrent validation in determining personality as an important predictor for successful performance of DSPs. The personality dimensions identified were "conscientiousness, agreeableness and emotional stability" (Robson et al., 2010, p. 215). Robson et al. also conducted extensive job analyses of DSPs such as reviews of their job materials and a job analysis questionnaire. These strategies helped them to develop a better understanding of the traits that may influence performance and fit of DSPs. The results of the study indicated that

both agreeableness (mean = 4.12) and conscientiousness (mean = 4.14) were significantly related to overall job performance among DSPs (mean = 0.02). The study further emphasized the influence of personality in the development and maintenance of camaraderie among coworkers and clients and indicated that personality can also signal dependability among staff.

The Executive Summary of the Idaho Council on Developmental Disabilities' DSP Statewide Workforce Employment Assessment Report (2003) identified four major categories that DSPs considered important: "salaries and benefits, recognition and respect, work environment, and information and training" (Center on Disabilities and Human Development, n.d., p., 2). The DSP Task Force conducted a survey that focused on identification of ways to improve job performance by addressing the four categories that are important among DSPs. The survey had nearly 400 respondents, who were asked to identify three factors that would improve their job performance. The most commonly indicated issue was compensation, and the second was training. Possible solutions for training DSPs included creation of incentives for training and education as a career ladder for DSPs, financial rewards for DSPs who complete the required training and education and remain in their position for a period of 1 year, and the use of web-based or distance learning to improve quality of performance (Center on Disabilities and Human Development, n.d.).

Background Context

Developmental Disabilities: Prevalence

One population that could benefit from the use of health promotion is individuals

with developmental disabilities. The prevalence of developmental disabilities among children in the United States was reported as 1 in 6 in 2006-2008 (CDC, 2011). For the period 2006-2008, the prevalence of DDs increased to 17.1 %, which represents approximately1.8 more children with DDs (CDC, 2011). These disabilities, including autism, attention deficit hyperactivity disorder, and other developmental delays, are costly, represent a public health concern, and have required increased health and education services (Boyle et al., 2011).

Heath Promotion for People with DD: A Public Health Concern

There are several health concerns for people with developmental disabilities. Obesity is a primary significant health risk among people with DD. It has been reported that 59 % of people with DD are overweight or obese (CDC, 2006). In order to reduce the incidence of obesity in individuals with DD, the U.S. Department of Health and Human Services and Public Health (1998) identified four components of health promotion for people with intellectual disability: monitoring healthy lifestyles and a health environment, monitoring complications and further disabling conditions, preparation for those with DD to understand and monitor their own health needs, and providing opportunities for participation (as cited in Doody & Doody, 2012). Health promotion must include three approaches: educational, behavioral, and social. The educational approach addresses the need of individuals with DD to learn about and improve health care approaches; the behavioral approach focuses on lifestyle changes; and the social change approach addresses the need to modify the physical, social, and economic environment (Naidoo & Wills, 2009).

Health Promotion Program Advocacy for People with DD

Rimmer (1999) identified the risks of secondary conditions among individuals with DD that can overlap with their primary disability. These include osteoporosis; osteoarthritis; decreased balance, strength, endurance, fitness, and flexibility; increased spasticity; weight problems; and depression. The healthcare needs of people with DD can be extensive, requiring complex patient care services. Federal, state, and local policy makers have collaborated to develop health promotion strategies in order to decrease secondary conditions among people with DD.

Health promotion is now being addressed by major agencies such as the Institute of Medicine (IOM), Centers for Disease Control and Prevention, National Center for Medical Rehabilitation Research, National Institute of Health, and National Institute on Disability Research (Rimmer, 1999).

Health Promotion Programs as Evidence-Based Strategies

Nurses need to engage in a wide range of health promotion activities. Evidence-based health promotion is "a process of implementing, and evaluating programs adapted from tested models or interventions in order to address health issues at an individual level and at a community level" (Altpeter, 2007, p. 7). Health promotion programs for people with disabilities have emerged as an important public health priority. Rimmer (2007) indicated that there are substantial barriers affecting the way in which individuals with disabilities participate in various types of health promotion activities. The identified barriers include lack of health education and lack of awareness of effective health promotion practices. Low participation may increase the risks for secondary conditions.

The result can have economic consequences, including increased medical expenditures. Some identified advantages of evidence-based health promotion strategies include effective use of resources, continuous support of quality improvement, and the creation of partnerships with various healthcare disciplines (Altpeter, 2007).

Community-Based Health Promotion Programs for People with DD

The Health People 2020 program was developed in order to overcome barriers by providing evidence-based health promotion strategies in a community setting. One of the goals of Healthy People 2020 is the identification of people with disabilities in the data system. The CDC supports disease prevention and health promotion, as evidenced by its support to 18 state-based programs promoting health and prevention of chronic diseases that can increase quality of life among the disabled population (CDC, 2012a). One of the goals of these programs is improving access to healthcare services among individuals with disabilities. The disability and health programs funded by CDC include the following states: Alabama, Alaska, Arkansas, Delaware, Florida, Illinois, Iowa, Massachusetts, Michigan, Montana, New York, North Carolina, North Dakota, Ohio, Oregon, Rhode Island, and South Carolina. The identified states have the specific focus of meeting their community's needs and promoting information sharing on their specific programs (CDC, 2012a).

A study that used a community-based health intervention called the Healthy Lifestyle Change Program (HLCP) addressed the effects of an education and exercise program among people with DD (Bazzano et al., 2009). The study involved a pretest and posttest evaluation over the periods of December 2005 to June 2006. The participants

included 431 community-dwelling adults with DD ranging in age from 18-65 who were considered obese (BMI > or = 25) and who were either at risk of or diagnosed with diabetes. The HLCP entailed a 7-month education and exercise program conducted twice per week. The goals included increasing knowledge, skills, and self-efficacy in relation to health, fitness, and nutrition among adults with DD (Bazzano et al., 2009). The result revealed that HLCP can improve lifestyles (61% reported increased physical activity), improve weight loss success (median weight loss of 7 lbs., decreased abdominal girth in 74% of participants), and increase community capacity.

Health Matters Class: A Community-Based Health Promotion Strategy for People with DD

The disability and health promotion program in Illinois focuses on monitoring the health status and health-related behavior of individuals with DD. The health initiatives address evidence-based health promotion and prevention to increase healthy lifestyles and reduce the risks of secondary conditions among people with DD. The State of Illinois' programs also assist professionals to gain knowledge and obtain necessary tools to effectively provide services for people with DD including resources to health and wellness (CDC, 2012a).

The Health Matters Class is an evidence-based program pioneered by University of Illinois, Chicago that provides selling points of a health promotion program to reduce healthcare costs, win the support of stakeholders of the program, introduce the importance of gathering resources and recruiting staff to participate in the program, and motivate participants with creative strategies as evidenced by the exercise and health

education activities and advocacy on improvement of health behaviors among people with DD (Marks et al., 2010).

Conceptual Model

Rosswurm and Larrabee (1999) were one of the first to propose an evidence-based practice change model. It is a description of not only a step-by-step process but also a planned practice change. The focus of the practice change model is to guide nurses and managers through an evidence-based change following the 6 steps: assess the need for change in practice, link the problem with interventions and outcomes, synthesize best evidence, design change in practice, implement and evaluate change in practice, and integrate and maintain practice change" (Thurston & King, 2004, p. 240).

The Rosswurm and Larrabee's (1999) EBP change model is the best fit for this project because it consistently encourages participation among stakeholders. For AID, the stakeholders include DSPs, wellness committee members, leadership, staff members, and the clients with DD. The model's emphasis is on practice change. Change can only be achieved and more likely to be accepted when people participate in making the change (Rogers, 1995). The process of implementing each round of Health Matters Class needs interdisciplinary collaboration and its successful outcomes can indicate improved capacities of DSPs to teach the Health Matters Class.

The Rosswurm and Larrabee's EBP change model has also been utilized in some other studies including: Huth, Zink and Horn (2005) utilized Rosswurm and Larrabee's model in determining the effects of massage therapy in improving outcomes for youth with cystic fibrosis (CF). This review modified the evidence-based model into four steps:

assessment, review of current clinical practice, synthesis of best evidence, and plan for change in practice. The study found the need for a strong partnership between the massage therapist and clinical nurse to promote comfort and enhancement of quality of life for youth with CF (Huth, Zink & Horn, 2005). Bonsall (1996) utilized the Rosswurm and Larrrabee model of evidence-based practice in effecting a policy change and practice on a bone marrow transplant unit (BMTU). The evidence-based model facilitated in the identification and implementation of safety policies and provision of adequate information to staff regarding adherence to safe clinical practice and compliance with regulating bodies such as The Occupational Health and Safety Administration (OSHA) and National Institute for Occupational Safety and Health).

Figure 1 defines the flow of evidence-based practice change model (Rosswurm & Larrabbee, 1999) as applied to the implementation of Health Matters Class as a health promotion initiative among people with DD.

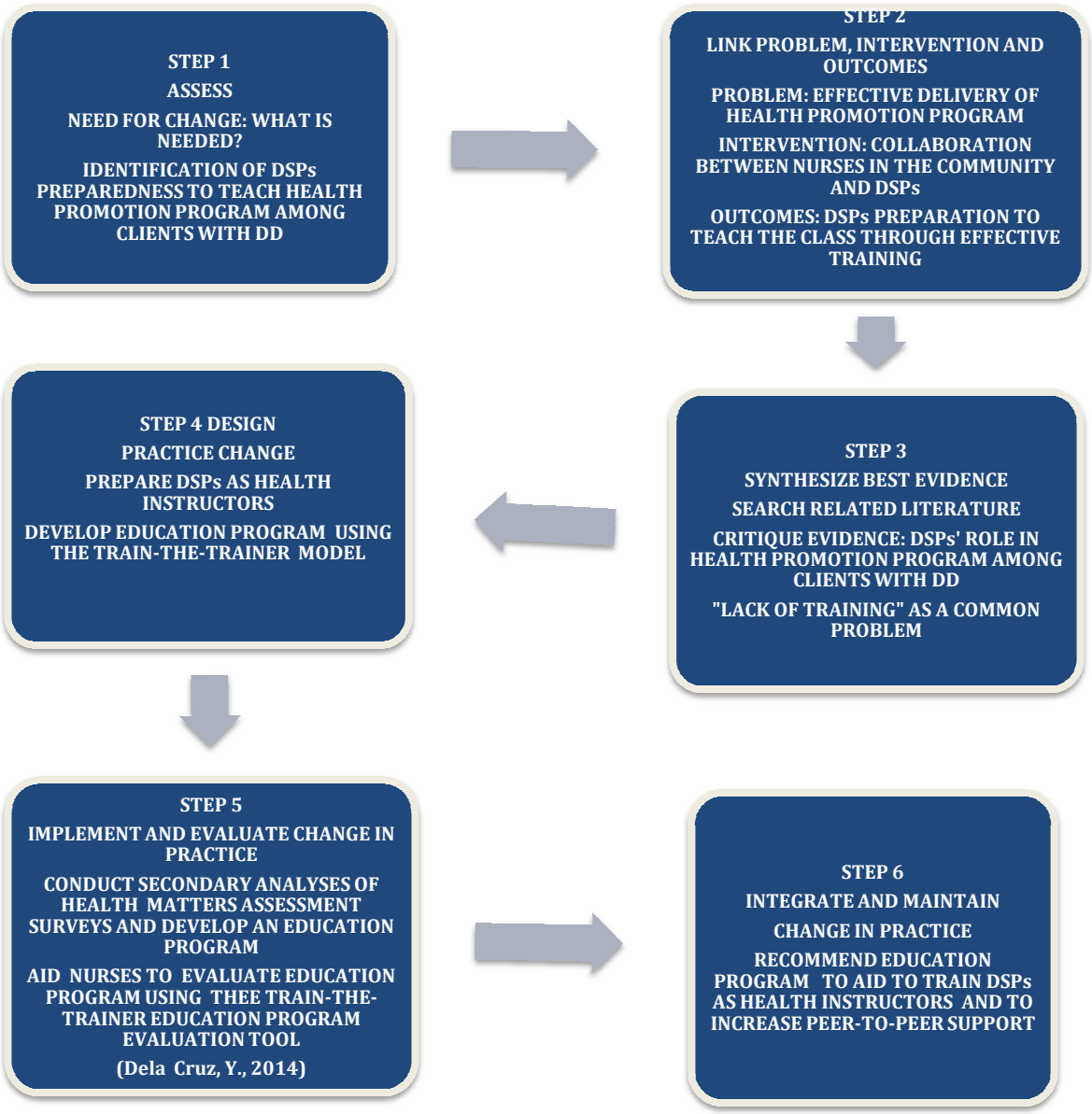

Figure 1. Application of Rosswurm and Larrabee's evidence-based practice change model: Evaluating DSPs' preparedness and a proposed educational program. From "A Model for Change for Evidence-Based Practice," by Y. Dela Cruz, 2013, *Journal of Nursing Scholarship*, *31*(4), 317-322.

Step 1 identified the assessment of the need to improve practice of health promotion among clients with DD. The assessment of the need for change occurred when AID leadership collaboratively agreed to improve the health and wellness activities among their clients with DD. The author participated with discussions among AID leadership, staff members and wellness committee team during the affiliation with the organization in August 2012. The discussions focused on sedentary activities among clients with DD and its impact to their health and wellness.

Step 2, linking the problem to interventions and outcomes defines a holistic view of the health initiative. The problem focused on effective delivery of health promotion program among clients with DD. DSPs, as newly appointed instructors of the Health Matters Class will need training and supervision in preparing their roles as health instructors. The intervention focused on the effective collaboration between nurses at AID and DSPs in enhancing the delivery of Health Matters Class to their clients with DD. The outcome of this collaboration will be an effective training among DSPs which can motivate clients with DD to learn ways to become physically active and eat healthy.

Step 3 is the synthesis of best evidence. A common finding revealed that training and supervision remains a concern among DSPs. Nurses working in community-based settings can provide an effective role in empowering DSPs and collaborating with community leaders to improve the delivery of health promotion programs among clients with DD.

Step 4, designing a change in practice identifies the definition of practice change and planning for implementation of the program. The train-the-trainer model will be

utilized in the creation of an education program for DSPs. The Health Matters Train-the-Trainer workshop provided certification among DSPs to teach the Health Matters Class. It is not however a determinant of their knowledge, skills, and commitment as health instructors. The proposed education program aims to promote peer-to-peer interactions and support among DSPs. It can provide DSPs' opportunity to learn the program before teaching to their clients with DD. The familiarity of the program can help enhance their confidence to teach the class. It can also provide them the opportunity to address issues pertaining to the concepts of health promotion and the physical activities that are included in each weekly class.

Step 5, identified the implementation and evaluation of practice change. A secondary analysis will be conducted from the two Health Matters Class surveys conducted before and after the implementation of the first round of Health Matters Class. The results of the secondary analyses provided direction in the creation of an education program. The education program aims to promote peer-to-peer support and interaction. The program will identify the need for DSPs to become knowledgeable of the concepts of Health Matters Class before teaching to their clients with DD. AID nurses to determine its benefits to the organization's health promotion initiative will evaluate the proposed program. An evaluation tool will be created to evaluate the train-the-trainer education program.

Step 6, integration and maintenance of change in practice will be a future goal. The education program will be recommended to AID as a means of helping DSPs prepare in their roles as health instructors of the Health Matters Class.

Section 3: Methodology

Section 3 addresses the project design, methods, population and sampling, data collection and data analysis, and project evaluation. This section also addresses the fourth step of Rosswurm and Larrabee's (1999) evidence-based practice change model: design practice change. The next step is the definition of the activities that transpired during the initiation of the health promotion program. There were two surveys that were conducted in AID, and their results were used in the development of an educational program to improve DSPs' capacity to teach a Health Matters Class.

Project Design/Methods

The project's design was based on the six-step evidence-based practice change model by Rosswurm and Larrabee (1999). The five steps of the practice change model were used.

This study used a descriptive method to evaluate results from the Health Matters Assessment surveys before and after the first round of Health Matters Class. The survey results provided direction in the development of an education program, which may ultimately assist DSPs in their roles as instructors of the Health Matters Class.

Population and Sampling

Three nurses evaluated the train-the-trainer curriculum. These nurses provided supervision to nonlicensed community workers including direct support staff (DSPs) in providing patient care among clients with DD. The nurses actively participated during the launch events of the Health Matters Class in 2012. Two nurses worked at Elgin Bowes Community Center, and one nurse worked at the main office of AID.

Data Collection

The Institutional Review Board (IRB) of Walden University provided approval for the review of this archival information. Archival data obtained from the HMA report (2012) and Health Matters Assessment survey (2013) were reviewed in order to provide direction in developing education program geared toward educating clients with DD.

The HMA report provided results regarding quantitative data collected online from CAP partners and affiliates in collaboration with Cornell Survey Research Institute, which designed the data collection protocol. The HMA report helped to identify the needs of community-based organizations in developing a sustainable health promotion program for people with DD (AID, 2012b). The HMA report has four categories:

1. Health promotion programs and services including food and nutrition classes, exercise classes, risk assessments, health messages within the organization, communication, and a wellness committee.
2. Environmental supports and resources for nutrition and physical activity including a summary of employees' perceptions on the accessibility of facilities and resources within the organization supporting both staff and employees to be physically active and make healthy food choices.
3. Organizational culture, which includes the organization's commitment, policies, incentives, and structures.
4. Employee knowledge, skills, and attitudes related to health promotion (AID, 2012b).

The Health Matters Assessment survey initiated by the wellness committee in

January 2013 was an original survey dedicated to DSPs. The goal of the survey was to assess the progress of the implementation of Health Matters Class as a health promotion initiative among clients with DD. The survey was composed of 10 questions that addressed issues regarding health promotion programs and services, environmental supports and services, organizational culture, and employee knowledge, skills, and attitudes related to health promotion:

1. Awareness of Health Matters Class
2. Awareness of health messages in program sites
3. Familiarity with wellness committee
4. Support and involvement from leadership in health promotion campaigns
5. Availability of space to conduct health promotion programs
6. Availability of resources including workshops, adequate staffing, and exercise equipment
7. DSPs' knowledge and confidence to conduct health promotion programs
8. Attendance of Health Matters Class training program
9. Necessity of more Health Matters Class training
10. Attendances of Health Matters Class launch events.

(AID, 2013)

Permissions to use the Health Matters Assessment report (2012) and the Health Matters Assessment survey (2013) were provided by AID in August 2013 (S. Quilin, personal communication, August 5, 2013).

Data Review

The archival results obtained from the two surveys provided information and a basis for the needs assessment. The following key components were described on both surveys: organizational resources, DSPs' knowledge of health promotion, and DSPs' skills and attitudes related to health promotion activities.

The HMA report (2012) determined results in ranges: very low (0-15), low (16-30), average (31-45), and high (41-60). Low scores indicated the need for improvement in the indicated category, and high scores indicated the category where the organization met benchmarks (AID, 2012b). The Health Matters Class (2013) outcomes were expressed in group frequencies.

Project Evaluation Plan

The process evaluation was used to evaluate the train-the-trainer program. This type of evaluation can determine if goals and objectives may or may not have been attained (Hodges & Videto, 2011). Three nurses at AID were invited to evaluate the education program using the train-the-trainer evaluation tool (see Table 1). A meeting was arranged with the three AID nurses to discuss the results of the train-the-trainer evaluation. The results of the evaluation will be used to determine the current progress of DSPs' roles as instructors of the Health Matters Class.

The three nurses used the train-the-trainer tool to determine potential buy-in to the education program. The education program helped the three nurses identify long-term benefits of providing more training to DSPs on health and wellness goals for their clients with DD. The evaluation tool identified three categories that could be examined to

determine potential benefits of the education program: content, presentation, and usefulness. The content was evaluated to determine if the education program covered important concepts to prepare DSPs teach the Health Matters Class. The presentation was evaluated to determine if the education program was consistent with DSPs' level of understanding, as well as whether the education program could be conducted in any AID setting. The usefulness was evaluated to identify whether the organization could benefit from the program in pursuing its goal of being staffed by health-oriented providers.

Table 1

Train-the-Trainer Education Program Evaluation Tool

Category	3 (Effective)	2 (Moderately effective)	1 (Adequate)	0 (Inadequate)
Content				
1. The education program can help DSPs increase their knowledge about health risks among people with DD.				
2. The education program identifies steps DSPs must take in conducting physical activity among their clients with DD.				
3. The education program identifies steps DSPs must take in conducting the education program.				
4. The education program can increase collaboration among DSPs through peer-to-peer mentoring.				
Presentation				
1. The health promotion concepts presented in the education program are easy to understand.				
2. The education program uses simple steps in identifying concepts of physical activity and health education among clients with DD.				
3. The elements of the education program are built upon one another, with some intentional overlapping of the content to allow DSPs to continuously review concepts throughout the program.				
4. The education program can be completed at any setting in AID.				
Usefulness				
1. The education program can help AID in making Health Matters Class a sustainable health promotion program.				
2. The education program can increase the knowledge and skills of DSPs as health instructors of Health Matters Class.				
3. The education program is a good training tool to evaluate DSPs' capacity to teach Health Matters Class.				
4. The education program addresses increasing motivation and participation among clients with DD.				

Note. From *The Train-the-Trainer Education Program Evaluation Tool* by Y. Dela Cruz, 2014.

Section 4: Findings, Discussion, and Implications

Summary of Findings

Health Matters Assessment (HMA) August 2012: Summary of Results (*n* = 125)

The sample was composed mainly of direct support staff (51.2%); health professionals, including dietitian, nurse, psychologist, social worker, and therapist (8.8%); administrative management (15.2%); case workers (22.4%); operational support (0.8%); and other staff (1.6%). The 2012 HMA report identified results relevant to the study, which include organization commitment, employees' capacity to provide health promotion among clients with DD, employees' skills and attitudes, and barriers preventing clients with DD from exercising (Tables 2-5).

Although the Health Matters Assessment report provided guidance in formulating a health prevention program targeted to clients with DD, the information was limited in that it did not specifically address DSPs' concerns regarding many of the issues. Data results were aggregate scores, which included the whole sample and isolating responses of DSPs was not possible. It is, however, an important implication that AID as an organization needs training and supervision among staff members. As newly appointed health instructors of the Health Matters Class, DSPs are in a significant position to improve their services as health providers. This can be best achieved if they are equipped with the knowledge and skills necessary to perform their roles. An additional imitation of the survey data was that respondents could endorse the "don't know" category in the survey. It is not known whether certain health promotion programs existed or whether participants were simply not aware of them.

Organizational culture.

Table 2

Organizational Commitment

	Strongly disagree (1) and disagree (2)	Agree (3) and strongly agree (4)	Don't know (0)	Mean
Health promotion is valued in our organization [total *n* =125] [valid *n* =124]	6.45% (8) 25.81% (32) 32.26% (40)*	44.35% (55) 11.29% (14) 55.64% (69)*	12.10% (15)	2.36
Innovation and education in health promotion are strongly encouraged in our organization [total *n* = 125] [valid *n* =125]	7.20% (9) 28.80% (36) 36.00% (45)*	36.00% (45) 12.00% (15) 48.00% (60)*	16.20% (20)	2.21
Employees collaborate to support health promotion programs [total *n* = 125] [valid *n* = 124]	8.87% (11) 32.26% (40) 41.13% (51)*	32.26% (40) 8.06% (10) 40.32% (50)*	18.55% (23)	2.02

* Total scores for both responses

Note. From "Health Matters Assessment Report," by HealthMattersProgram.org, 2012, p.3. Reprinted with permission.

Employee knowledge related to health promotion

Table 3

What Is Your Capacity to Provide Health Promotion to Adults With I/DD?

	Strongly disagree (1) and disagree (2)	Agree (3) and strongly agree (4)	Don't know (0)	Mean
I understand health risk factors related to persons with I/DD. [total *n* =125] [valid *n* =120]	2.50% (3) 1.67% (2) 4.17% (5)*	69.17% (83) 20.83% (25) 90.00% (108)*	5.83% (7)	2.97
I think health promotion is important for people with I/DD. [total *n* = 125] [valid *n* =121]	1.65% (2) 0.83% (1) 2.48% (3)*	54.55% (66) 38.02% (46) 92.57% (112)*	4.96% (6)	3.19
I believe that clients should participate in developing their personal health promotion goals. [total *n* =125] [valid *n* =121]	1.65% (2) 0.83% (1) 2.48% (3)*	57.85% (65) 21.49% (26) 79.34% (91)*	8.26% (10)	3.02
I know where to find resources to learn more about physical activities. [total *n* =125] [valid *n* =121]	2.48% (3) 9.09% (11) 11/57% (14)*	53.72% (65) 21.49% (26) 75.21% (81)*	13.22% (16)	2.68
I know how to find resources about nutrition. [total *n* =125] [valid *n* =121]	2.48% (3) 6.61% (8) 9.09% (11)*	60.33% (73) 20.66% (25) 80.99% (98)*	9.92% (12)	2.79

* Total scores for both responses

Note. From "Health Matters Assessment Report," by HealthMattersProgram.org, 2012, p. 8. Reprinted with permission.

Employee skills and attitudes related to health promotion activities.

Table 4

Do You Think You Can Do Health Promotion Activities?

	Not at all confident (1)	(2)	(3)	(4)	Totally confident (5)	Mean
I am confident that I can plan a health promotion program such as health education classes. [total *n* = 125] [valid *n*= 120]	11.67% (14)	12.50% (15)	31.67% (38)	23.33% (28)	20.83% (25)	3.29
I am confident that I can run a health promotion program for people with I/DD. [total *n*= 125] [valid *n* = 119]	14.29% (17)	10.08% (12)	27.73% (33)	25.21% (30)	22.69% (27)	3.32
I am confident that I can evaluate improvements in health functions and behavior for people with I/DD. [total *n* = 125] [valid *n* = 120]	15.00% (18)	12.50% (15)	30.83% (37)	23.33% (28)	19.33% (22)	3.32
I am confident that I can teach people with I/DD how to do exercises to increase their flexibility. [total *n* =125] [valid *n* = 120]	10.83% (130	13.33% (16)	25.83% (31)	23.33% (28)	26.67% (32)	3.42
I am confident that I can teach people with I/DD how to make healthy food choices. [total *n* =125] [valid *n* = 119]	8.40% (10)	6.72% (8)	33.61% (40)	26.05% (31)	25.21% (30)	3.53

Note. From "Health Matters Assessment Report," by HealthMattersProgram.org, 2012, p. 9 Reprinted with permission.

Table 5

What Barriers Keep Persons With I/DD From Exercising?

	Strongly disagree (1) and disagree (2)	Neither (3)	Agree (4) and strongly agree (5)	Mean
Lack of interest [total *n* = 125] [valid *n* = 20]	3.33% (4) 5.00%(6) 8.33% (10)*	10.00% (12)	51.67% (62) 30.00% (36) 81.67% (98)*	4.00
Exercising is too difficult for them. [total *n*=125] [valid *n* = 121]	9.92% (12) 28.10% (34) 38.02% (46)*	27.27% (33)	28.10% (34) 6.61% (8) 34.71% (42)*	2.93
They don't know how to exercise. [total *n* = 125] [valid *n* = 120]	7.50% (9) 23.33% (28) 30.88% (37)*	13.33% (16)	42.51% (51) 13.33% (16) 55.84% (67)*	3.31
They don't have anyone to exercise with. [total *n*= 125] [valid *n*= 120]	6.67% (8) 17.50% (21) 24.17% (29)*	23.33% (28)	40.00% (48) 12.50% (15) 52.50% (63)*	3.34
No one shows them how to exercise. [total *n* = 125] [valid *n* =121]	6.61% (8) 21.49% (26) 28.10% (34)*	23.14% (28)	36.36% (44) 12.40% (15) 48.76% (59)*	3.26

* Total scores for both responses

Note. From "Health Matters Assessment Report," by HealthMattersProgram.org, 2012, p. 11. Reprinted with permission.

Health Matters Class Survey Report, August 2013: Summary of Results (*n* = 149)

The sample was composed of qualified intellectual development professionals (QIDPs; 17.4%), behavioral health qualified mental health professionals (QMHPBHs; 11.4%), direct support staff (DSPs; 33.5%), janitorial aid (0.7%), Health Matters instructors (1.3%), job coaches (4%), management (8%), nurses (8%), administrative support staff (7.4%), social workers (2%) and other (15.4%).

Table 6

Summary of Results Health Matters Class Survey Report, 2012

Question	Yes	No
Are you aware of a Health Matters Class that was conducted at your program site? [total *n* =149] [valid *n* = 149]	75.84% (113)	24.16% (36)
Are there any health messages posted on your program sites pertaining to health promotion for Health Matters Class? [total *n* = 149] [valid *n* = 148]	66.89% (99)	33.11% (49)
Are you familiar with AID's Wellness Committee? [total *n* = 149] [valid *n* = 149]	84.56% (126)	15.44% (23)
Do you think leadership such as management, program directors, and team leaders provide support and involvement in health promotion campaigns? [total *n* = 149] [valid *n* = 148]	77.70% (115)	22.30% (33)
Do you think AID program sites have available space to conduct health promotion programs through physical activity and health education class? [total *n* = 149] [valid *n* = 147]	68.71% (101)	31.29% (46)
Do you think AID has resources available such as workshops, adequate staffing, and exercise equipment to prepare staff to lead clients in health promotion activities? [total *n* =149] [valid *n* =147]	48.30% (71)	51.70% (76)
Do you think you have the knowledge and confidence to conduct health promotion programs by providing nutrition classes and physical activity in your program sites? [total *n* = 149] [valid *n* = 144]	61.81% (89)	38.19% (55)
Were you able to attend the Health Matters Training Program last August 2012 conducted by Community Academic Partnership (CAP), of which AID is an affiliate? [total *n* =149] [valid *n* = 149]	20.13% (30)	79.87% (119)
Do you think AID requires mote Health Matters Class training? [total *n* = 149] [valid *n* = 142]	64.08% (91)	35.92% (51)
Were you able to attend the Health Matters Class launching events last September 25, 2012 in either the Elgin Bowes or the Aurora main office? [total *n* =149] [valid *n* = 149]	34.23% (51)	65.77% (98)

Note. From "Health Matters Class Survey," by AID, 2013.

The Health Matters Class Survey was conducted after the first round of the health promotion program. There were 149 participants, and 50 of them were DSPs. Table 6 summarizes the results of the survey, which include staff members' responses on the organization's progress in transitioning as health-oriented providers. Overall, while the majority of respondents (75.84%) were aware of the Health Matters Class, posting of health messages (66.89%), leadership support (77.70%), and available space to conduct health promotion programs (68.71%), there was a need to provide training and supervision among staff members. Attendance of the Health Matters program has been reported as low (20.13%), and the majority of the respondents believed that AID required more Health Matters Class training (64.08%). Despite the high percentage (61.81%) of participants indicating that they possessed the knowledge and confidence to conduct health promotion programs, the data did not indicate specific competency in conducting the Health Matters Class. Health promotion campaigns for staff members such as the launch events for the Health Matters Class were not well attended (34.23%).

Staff-led exercise and health promotion programs should be included in organizational policies in the community. Community workers must be provided with training and supervision in order to increase their engagement as health-oriented workers. The increased knowledge can lead to advocacy among their patient population. Community leaders can influence the change if they support health promotion programs among the DD population.

Practice

Based on the data review of the Health Matters Assessment Report (2012) and Health Matters Class Survey (2013), staff members at AID indicated the importance of preparing staff to conduct health promotion activities. In this study, I propose an education-based program that can promote peer-to-peer support while staff are learning the content of the Health Matters Class themselves. This education program would use the train-the-trainer model to increase peer-to-peer support. The train-the-trainer workshop provided by CAP prepares DSPs to become certified instructors. The education program focuses on providing DSPs with the opportunity to learn the material in the Health Matters Class in order to effectively teach it to their clients with DD.

The content of the train-the-trainer education program (see Appendix A) is based on *The Exercise and Nutrition Health Education Curriculum* (Marks et al., 2010) for the Health Matters Class.

Objectives

1. Define education program using the train-the-trainer model.
2. Define the steps of the education program: learn, train, teach, motivate, and integrate the Transtheoretical Model of Behavior Change (Prochaska & Diclemente).
    - *Learn*: What do I need to know?
    - *Train*: What do I need to achieve?
    - *Teach*: What do I need to provide?
    - *Motivate*: What do I need to maintain?

3. Evaluate learning outcomes of DSPs.

4. Recommend integration of education program as a training tool for DSPs teaching the Health Matters Class at AID.

Education Program: Train-The-Trainer Education Program for Direct Support Staff (DSPs) as Health Instructors of AID Health Matters Class

Learn: What do I need to know? Precontemplation and Contemplation. During the precontemplation stage, people are either aware or unaware of their need to change their behavior (Marks et al., 2010). It is important to increase DSPs' understanding of health promotion aspects such as health, exercise, and nutrition.

During the contemplation stage, people are aware of and are thinking of change, but the commitment to take action has not been made (Marks et al., 2010). DSPs may reflect on their own health issues, may consider lifestyle changes, and may assess their respective views about exercise and nutrition.

Train: What do I need to teach? Preparation phase. The first four lessons address DSPs' own reflections of their roles in the community in providing care to their clients with DD. They also serve as a reflection of their own perceptions as healthcare providers in the community. The important concepts are introduced to give DSPs a focus on their roles as health instructors.

During the third stage of behavior change, people are ready to take action and pursue change related to a specific behavior (Marks et al., 2010). As the Health Matters Class has been implemented for almost 1 year now, it is assumed that DSPs have shown their commitment to making things happen.

Teach: What do I need to provide? Action stage. The fourth stage of change involves people taking action and behavior change taking place (Marks et al., 2010). DSPs have knowledge about physical activity and health education and are trying to perform hands-on demonstrations. Reinforcing new behaviors is the focus on this stage to maintain exercise and nutrition goals.

Motivate: What do I need to maintain? Maintenance stage. The fifth stage of change is the maintenance stage. This step identifies the motivation phase of DSPs in making Health Matters Class a sustainable health promotion program. People in this stage consider ways to prevent relapse (Marks et al., 2010). It is recommended that activities focus on reviewing health promotion practices in order to prepare instructors of Health Matters Class well.

Research

The Health Matters Class is an evidence-based program that was pioneered by the University of Illinois, Chicago. The health initiative provides "selling points" to clients with DD concerning goals to increase their physical activity and lead meaningful lives in the community (Marks et al., 2010). Community Academic Partnerships (CAP) continues to provide health promotion campaigns among the DD population through its continued support and supervision among its partners and affiliates.

The proposed Train-the-trainer program is based on Marks and colleagues' (2010) Exercise and Nutrition Health Education Curriculum for people with DD. The first 2 lessons address the components of education program and overview of the DD population (Tables A.1 & A.2). Lesson 3 defines the general concepts of health

promotion (Table A.5). Lesson 4 is a reflection of one's own health (Table A.7). Lessons 5 to 10 address the health concepts from basic needs, exercises, healthy food choices, our body's normal physiology and health problems such as hypertension and diabetes (Tables A.9, A.11, A.13, A.15, A.17 & A.19). Lesson 11 and 12 provide DSPs the opportunity review important values such as commitment, good practices and healthy attitudes (Tables A.21 & A.23). Lesson 13 identifies the FABS concept: Flexibility, Aerobic, Balance and Strength, which are the key elements of physical activity for people with DD (Table A.25). Lesson 14 will provide DSPs the opportunity to create sample of exercise (Table A.27). Lesson 15 defines the strategies of making program sustainable (Table A.29). Lesson 16 provides guidelines of creating an exercise video (Table A.31). Lesson 17 defines the strategies of staying connected (Table A.33). Finally, lesson 18 will be DSPs' graduation to the program (Table A.35).

The goal of the program is to complete all the lessons in 6 weeks. DSPs will attend classes three times per week on Mondays, Wednesdays, and Fridays. The duration of the class will be one hour. These centers can be a venue for the classes namely: AID main office, Elgin Bowes center and Yorkville center. The nurses can provide supervision in these areas and spaces are adequate for training.

The train-the-trainer education program was presented to three nurses at AID. The purpose of this presentation was to provide the nurses with an opportunity to determine the appropriateness of the program. The nurses were given ample time to review the education program and to discuss their respective feedback. The education program seeks to assist DSPs in preparing themselves as health instructors through their knowledge,

skills, and attitudes. The nurses were provided with the “Train-the-Trainer Education Program Evaluation Tool” (Dela Cruz, 2014).

The evaluation results were discussed with the three nurses. The evaluation tool (see Table 2) is divided into three categories: content, presentation, and usefulness. The three nurses agreed that the education program could help DSPs increase their knowledge of the health risks of the DD population. The nurses also agreed that the education program identified the steps needed to conduct a physical activity. In relation to collaboration among DSPs, only two nurses (67%) agreed that the education program could facilitate better collaboration. One nurse (33%) identified workload as a barrier in increasing collaboration among DSPs. Despite the benefits of the program, DSPs are still faced with other tasks in the community that can limit their time to communicate with their peers.

The three nurses agreed (100%) that the presentation of the education program was easy to understand and that the steps are simple and could be completed in any setting at AID. The nurses agreed that DSPs’ ability to comprehend an education program is important if they are to become better instructors. For teaching to be effective, it is important that learners understand the concepts of health promotion and their application through exercise classes.

Table 7

Train-the-Trainer Education Program Evaluation Tool Results.

Category	Effective (3)	Moderately effective (2)	Adequate (1)	Inadequate (0)
Content				
1. The education program can help DSPs increase their knowledge about health risks among people with DD. [*n* = 3 valid *n* = *3*]	100% (3)			
2. The education program identifies steps needed by DSPs in conducting physical activity among their clients with DD. [*n* = 3 valid *n* = *3*]	100% (3)			
3. The education program identifies steps needed by DSPs in conducting the education program. [n = 3 valid *n* = *3*]	100% (3)			
4. The education program can increase collaboration among DSPs through peer-to-peer mentoring [*n* = 3 valid *n* = *3*]	67% (2)	33% (1)		
Presentation				
1. The health promotion concepts presented in the education program are easy to understand. [*n* = 3 valid *n* = *3*]	100% (3)			
2. The education program uses simple steps in identifying concepts of physical activity and health education among clients with DD. [*n* = 3 valid *n* = *3*]	100% (3)			
3. The education program is build upon each other with some intentional overlapping of the content to allow DSPs to continuously review concepts throughout the program. [*n* = 3 valid *n* = *3*]	100% (3)			
4. The education program can be completed at any setting in AID. [*n* = 3 valid *n* = *3*]	100% (3)			
Usefulness				
1. The education program can help AID in making Health Matters Class as a sustainable health promotion program. [*n* = 3 valid *n* = *3*]	100% (3)			
2. The education program can increase the knowledge and skills of DSPs as health instructors of Health Matters Class. [*n* = 3 valid *n* = *3*]	100% (3)			
3. The education program is a good training tool to evaluate DSPs' capacity to teach Health Matters Class.	100% (3)			
4. The education program includes aspects of increasing motivation and participation among clients with DD. [n = 3 valid *n* = *3*]	100% (3)			

Note. From "The Train-the-Trainer Education Program Evaluation Tool," by Y. Dela Cruz, 2014.

Lastly, the nurses considered the education program as useful as it can be a good training tool to determine the readiness of each DSP instructor. The Train-the-Trainer Education Program was recommended to provide assistance to DSPs. The nurses concurred with the potential benefits of the program and have recommended its continued implementation. AID Senior Vice President was provided a copy of the education program to further discuss to CEO and upper leadership.

Strengths

In general, the barriers outlined in the surveys such as inadequate staffing, lack of funding and resources, leadership support have all been consistently reported on health promotion campaigns. The surveys also indicated that staff members did possess the confidence to run a health promotion program, evaluate its outcomes and teach the information to clients with DD. As newly appointed health instructors of the Health Matters Class, DSPs need to be more prepared in this task. One strategy would involve the creation of an education program that can help prepare DSPs teach clients on how to be healthy through physical activities and healthy food choices.

The education program highlights the 1.5 hours of sessions for each part of the curriculum. It is important to determine knowledge retention and skills application. The identified duration for each class will provide DSPs the opportunity to have peer-to-peer interaction.

Limitations

In summary, the second Health Matters Assessment Class survey also did not specifically address DSPs' feedback. Based on the access to archival data provided, there

was no specific way of knowing how DSPs specifically responded to the survey questions regarding health promotion from AID.

The limitation of this study also includes the sample size (n=3). The evaluation tool can be provided with additional AID stakeholders to obtain additional input in terms of the usefulness of the education program. AID contains community nurses assigned in various community living centers and residential homes. If these areas are represented, there will be an adequate feedback of how the education program can be implemented in all of AID's designated areas.

Analysis of Self

As scholar, it is important to identify human needs and integrate human caring in every research study. "Scholarships and research are hallmarks to nursing education" (AACN., n.d.). As a scholar, I was able to create an education program that is based on evidence-based practice among clients with DD. This program can further increase the ties among clients with DD and DSPs.

As a practitioner, it is important to have the ability to identify resources in order to mobilize delivery of care. DSPs can benefit with further training on Health Matters Class through the supervision of community nurses. This study provided me the opportunity to collaborate with community stakeholders, take action to an identified concern which was provision of training among DSPs through a proposed education program.

As a project developer, this study provided me the opportunity to enhance my skills in data reviews, data interpretation, collaboration with stakeholders and program development. This study can have follow-up research work; a more specific assessment

report can be created in order to gather data that is specific among DSPs teaching the health promotion program.

Summary and Conclusions

This study aimed to identify DSPs level of preparedness as instructors of Health Matters Class. The Health Matters Assessment Reports provided initial data in the identification of DSPs needs to effectively teach the class. Community nurses are identified to play an active role in training DSPS. The stakeholders agreed (Table28) that an education program for DSPs is beneficial.

The identification of healthcare needs in the community requires a strong collaboration among stakeholders. The objectives of this study are realistic and attainable and with further research can influence community leaders in the advocacy of health promotion among the DD population.

Section 5: Scholarly Product Dissemination

The results of this study will be presented at AID upon approval of the organization's Chief Executive Officer. A presentation will be arranged and audience should compose Wellness Committee, leadership and DSPs. This will promote collaboration regarding the utilization of education program to help improve delivery of Health Matters Class among their clients with DD.

The results of data reviews will be presented to leadership to provide understanding of the need for education program among DSPs as instructors of Health Matters Class. The education program will be presented to leadership emphasizing its benefits to DPSs in terms of increasing their knowledge about health concept for people with DSP and the skills to conduct an education program.

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Appendix A: Train-the-Trainer Education Program for DSPs as Instructors of Health Matters Class Among Clients With DD

Table A1

Lesson 1, Introduction to Education Program

Lesson	Contents
Duration: I hour Wrap up: 15 minutes Required: DSP Facilitator	
1. Discuss objectives	1. Train-the-Trainer model for the education program 2. Process of education Program 2.1 Learn 2.2 Train 2.3 Teach 2.4 Motivate
2. Transtheoretical Model of Behavior Change	1. Precontemplation stage 2. Contemplation stage 3. Preparation Stage 4. Action Stage 5. Maintenance stage
3. Review: Americans with Disabilities	1. Americans with Disabilities Act 2. Rights of clients with DD
4. Reflections	1. As a caregiver for people with DD 1.1 Challenges 1.2 Rewards 1.3 Future goals

Note. From *Health Matters: The Exercise and Nutrition Health Education Curriculum for People With Developmental Disabilities* (p. 221), by B. Marks, J. Sisirak, & T. Heller, 2010, Baltimore, MD: Paul Brookes. Reprinted with permission.

Table A2

Lesson 1 Evaluation Tool

Evaluation Questions	Very Helpful (4)	Helpful (3)	Fairly Helpful (2)	Not helpful (1)	I don't know (0)
Discussion of objectives					
Transtheoretical Model of Behavior Change					
Reflection as a Caregiver for people with DD					

From: "Evaluation Tool" by Dela Cruz, Y. (2014)

Table A3

Lesson 2, Introduction to Education Program

Lesson	Contents
Duration: 1 hour Wrap up: 15 minutes Required: DSP Facilitator	
1. Overview of DD Population	1. Review of DD in children aged 3-17 years 1.1 Main findings 1.2 Prevalence of DD from 1997-2008 1.3 Specific developmental disabilities
2. Related health conditions of people with DD	1. Disability and obesity 2. Secondary conditions 2.1 Bowel and bladder problems 2.2 Fatigue 2.3 Injury 2.4 Mental health and depression 2.5 Pain 2.6 Pressure sores or ulcers

Note: From Centers for Disease Control and Prevention. (2011). *Developmental disabilities increasing in U.S.* retrieved from http://www.cdc.gov/features/ds_dev_disabilities.Centers for Disease Prevention. (2014). *Disability and health: Related conditions*. Retrieved from http://www.cdc.gov/ncbddd/disabilityandhealth/healthrelatedconditions.htm

Table A4

Lesson 2 Evaluation Tool

Evaluation Questions	Very Helpful (4)	Helpful (3)	Fairly Helpful (2)	Not helpful (1)	I don't know (0)
Overview of DD Population					
DD and Secondary Conditions					

From: "Evaluation Tool" by Dela Cruz, Y. (2014)

Table A5

Lesson 3, General Concepts of Health and Health Promotion

Lesson (Topic)	Contents
Duration: 1 hour Wrap up: 15 minutes Required: DSP Facilitator	
1. Health	1. What is healthy to me? 1.1 Absence of sickness and pain 1.2 Physical, mental, emotional, spiritual
2. Physical Activity	2. What is physical activity? 2.1 Benefits 2.2 Types of physical activity: examples 2.3 Duration of physical activities
3. Exercise	3. How do we exercise 3.1 Proper attire during exercise 3.2 Things to do before we exercise 3.3 Benefits of warm-ups and stretches: discuss examples 3.4 Benefits of aerobic exercises and cool downs 3.5 Benefits of different exercises for the human body: stretching, flexibility exercises, strength and endurance
4. Good Nutrition	4. What is good nutrition? 4.1 Benefits of good nutrition 4.2 Effects of good nutrition on exercise and physical activity 4.3 Review the anatomy of my pyramid "My pyramid.gov Steps to a healthier you" 4.4 Various energy needs for different activities
5. Healthy Choices and Self-Advocacy	5. What are considered healthy behaviors
6. Rights versus Responsibilities	1. Review (p.222-224)

Note. From. Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities.* Baltimore: MD, Paul Brookes. 1-62. Reprinted with permission.

Table A6

Lesson 3 Evaluation Tool

Evaluation Questions	Very Helpful (4)	Helpful (3)	Fairly Helpful (2)	Not helpful (1)	I don't know (0)
Discussion of health promotion concepts Group Discussions Wrap up discussion					

From: "Evaluation Tool" by Dela Cruz, Y. (2014)

Table A7

Reflection of One's Own Health

Lesson (Topic)	Contents
Duration: 1 hour Wrap up: 15 minutes Required: DSP Facilitator Facilitator will wrap up previous week's discussion.	
1. Reflection	1. How do I see my own health? 1.1 What are the good things about you? 1.2 How do I define my own health?
2. Self-esteem	1. Definition 2. How does self-esteem develop? 3. Effects of low self-esteem 4. Signs of high self-esteem 5. Signs of low self-esteem
3. Discussions 3.1 Heart Rate	2. Definition of Heart Rate 2.1 Normal ranges 2.2 What affects heart rate? 2.3 Importance of heart rate during exercise 2.4 Medications and heart rate 2.5 Target heart rate zones
3.2 Blood Pressure	Define Blood Pressure 2.6 Normal range 2.7 What affects blood pressure? Physical activity and blood pressure Medications that affect blood pressure 2.8 Blood pressure and exercise
4. Return Demonstrations	3. BP and HR monitoring of each participants 3.1 Report results
5. Influences of Exercise	4. Positive things related to exercise Negative things related to exercise

Note: From: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities*, p.62-89 Baltimore: MD, Paul Brookes. Reprinted with permission.

Table A8

Reflection of One's Own Health Evaluation Tool

Evaluation Questions	Very Helpful (4)	Helpful (3)	Fairly Helpful (2)	Not helpful (1)	I don't know (0)
Reflection of one's own health Group Discussions on BP, HR and Exercise Return demonstrations Wrap up discussions					

Note: From: "Evaluation Tool" by Dela Cruz, Y. (2014)

Table A9

Water, Food, Medication, and Exercises

Lesson Topic	Contents
Activity: Group Discussion/Reflection Duration: 1 hour Wrap-up: 15 minutes Facilitator will wrap up previous week's discussion.	
1. Drinking Water	1.1Why is water important? 1.2 How much water should I drink? 1.3 Causes of dehydration 1.4 Signs of dehydration 1.5 Tips to get enough water intake 1.6 Bottled versus tap water
2. Food preferences	2.1 Foods and beverages I like to eat 2.2 The Food Pyramid
3. Medications	3.1 Effects of medications to us 3.2 Effects of medication to heart rate and blood pressure

Note: From: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities*, p., 90-111. Baltimore: MD, Paul Brookes. Reprinted with permission.

Table A10

Water, Food, Medication, and Exercises Evaluation Tool

Evaluation Questions	Very Helpful (4)	Helpful (3)	Fairly Helpful (2)	Not helpful (1)	I don't know (0)
Group discussions on water and food preferences Discussion on medications Wrap up discussions					

Note From: "Evaluation Tool" by Dela Cruz, Y. (2014).

Table A11

Guidelines in Exercise

Lesson	Content
Activity: Group Discussion/Reflection Duration: 1 hour Wrap-up: 15 minutes Facilitator will wrap up previous week's discussion.	
1. Things to remember when exercising	1. Medical clearance 2. Good time to exercise 3. Stretch and warm up 4. Start slowly 5. Exercise regularly
2. Before Exercise	1. Warm up and Stretches 2. Why is proper breathing important?
3. During exercise	1. Exercise at slow and steady pace 2. Breathing techniques during exercise 2.1 Simple breathing technique 2.2 Lying down breathing technique 2.3 Relaxing sigh technique 2.4 Deep, relaxed breathing technique 3. Heart monitors 4. How fast is your heartbeat? 5. Heart guide 6. What if you get too hot? 7. When should you get help? 8. Keeping safe during exercise
4. After exercise	1. Cool downs
5. Return demonstrations (find a partner)	1. Breathing techniques 2. Warm-ups 3. Stretching 4. Cool-downs
6. Importance of cleaning exercise equipment	
7. Wrap-up	

Note: From: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities*, p., 112-145 Baltimore: MD, Paul Brookes. Reprinted with permission.

Table A12

Guidelines in Exercise Evaluation Tool

Evaluation Questions	Very Helpful (4)	Helpful (3)	Fairly Helpful (2)	Not helpful (1)	I don't know (0)
Concepts about exercise Discussions on before, during and after exercise Peer-to-peer demonstrations Wrap up					

Note: From: "Evaluation Tool" by Dela Cruz, Y. (2014)

Table A13

Nutrition

Lesson	Contents
Activity: Group Discussion/Reflection Duration: 1 hour Wrap-up: 15 minutes Facilitator will wrap up previous week's discussion.	
1. Nutrients we need for physical activity	1. Carbohydrates 2. Proteins 3. Fats 4. Sources carbohydrates, proteins and fats
2. Blood sugar and exercise	1. Complete nutrient exercises (Group discussion) 2. General guidelines 2.1 Check before physical activity 2.2 Watch symptoms for low blood sugar 2.3 Check blood sugar after physical activity 1. Integrate clients with DD's needs/exercise plans 2. Duration 3. Identify days, time and venue

Note: From: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities,* p., and 112-145. Baltimore: MD, Paul Brookes. Reprinted with permission.

Table A14

Nutrition Evaluation Tool

Evaluation Questions	Very Helpful (4)	Helpful (3)	Fairly Helpful (2)	Not helpful (1)	I don't know (0)
Concepts about nutrients, physical activity Nutrient Game Answers and Nutrient Game exercises Blood sugar and exercise Wrap up					

From: "Evaluation Tool" by Dela Cruz, Y. (2014)

Table A15

Exercise and Nutrition Plans

Lesson	Contents
Activity: Group Discussion/Reflection Duration: 1 hour Wrap-up: 15 minutes Facilitator will wrap up previous week's discussion. 1. Exercise Plan (Individual Report) 2. Perform physical activity for 15 minutes 3. Nutrition Plans (Individual report from Participants)	1. Identify each participant's exercise plan from the duration of exercise, frequency, the type of exercise and the time to do the exercise. 2. Warm up, Exercise and Relaxation 3. Identify foods they eat for breakfast, lunch, and dinner 3.1 Review food pyramid 3.2 Review guidelines for shopping in groceries 3.3 Review eating fruits and vegetables during meals and snack times

Note: From: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities,* p., 112-145 Baltimore: MD, Paul Brookes. Reprinted with permission.

Table A16

Exercise and Nutrition Plans Evaluation Tool

Evaluation Questions	Very Helpful (4)	Helpful (3)	Fairly Helpful (2)	Not helpful (1)	I don't know (0)
Discussions on exercise and meal plans Physical activity					
Individual reports on exercise and meal plans					
Wrap up					

Note: From: "Evaluation Tool" by Dela Cruz, Y. (2014)

Table A17

Healthy Food Choices: How Much Should I Eat?

Lesson	Contents
Activity: Group Discussion/Reflection Duration: 1 hour Wrap-up: 15 minutes	
1. Portion sizes count	1. What does portion mean to you? (p. 282-23)
2. Activities and food we need'	2. How much food we eat depends on what we do during the day (p. 276-279)
3. Snacking and vending machines	3. Choosing the right snacks
4. Taste, texture and smell	4. Identification of tastes 4.1 Bitter 4.2 Sour 4.3 Salty 4.4 Sweet (p.290-291)
5. Influences on food choices	5. Review Handout (p.296)
6. Cholesterol	6. Define Cholesterol 6.1 Sources 6.2 Good cholesterol 6.3 High cholesterol 6.4 Values of cholesterol
7. Grocery shopping	7. Quality of meats, fruits and vegetables 7.1 Hand washing 7.2 How can germs get on food? 7.3 Eating food that is not clean 7.4 Cost and content of food items

Note: From: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities*. p. 252-296. Baltimore: MD, Paul Brookes. Reprinted with permission.

Table A18

Healthy Food Choices Evaluation Tool

Evaluation Questions	Very Helpful (4)	Helpful (3)	Fairly Helpful (2)	Not helpful (1)	I don't know (0)
Discussions Review of Handouts					
Discussion on cholesterol/grocery shopping Wrap up					

From: "Evaluation Tool" by Dela Cruz, Y. (2014)

Table A19

Blood Circulation, High Blood Pressure, and Diabetes

Lesson	Contents
Activity: Group Discussion/Reflection Duration: 1 hour Wrap-up: 15 minutes	
1. Review Body Parts Hand Out	1. Inside Human Body and its functions 1.1 Lungs 1.2 Liver 1.3 Gall bladder 1.4 Intestines 1.5 Brain 1.6 Heart 1.7 Stomach 1.8 Pancreas
2. Diabetes	1. What is diabetes? 1.1 Type 1 1.2 Type 2 2. Prevention of Diabetes
3. Heart Disease	1. What is heart disease? 2. What can lead to heart disease? 3. Prevention of heart disease

Note: From: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities*, p.292-311. Baltimore: MD, Paul Brookes. Reprinted with permission.

Table A20

Blood Circulation, High Blood Pressure, and Diabetes Evaluation Tool

Evaluation Questions	Very Helpful (4)	Helpful (3)	Fairly Helpful (2)	Not helpful (1)	I don't know (0)
Discussions					
Body Parts					
Diabetes					
Heart disease					
Group Exercise					
Wrap up					

Note: From: "Evaluation Tool" by Dela Cruz, Y. (2014).

Table A21

Building Commitment: Increasing One's Knowledge and Skills

Lesson	Content
Activity: Group Discussion/Reflection Duration: 1 hour Wrap-up: 15 minutes Facilitator will wrap up previous week's discussion.	
1. Wants and Needs	1. What are some of the things that you have? 2. What are some of the things that you need? 3. What do we need? 3.1 Basic 3.2 Bodily needs 3.3 Psychosocial needs 3.4 Spiritual needs
2. Pain	1. What does pain mean to you? 2. How do you describe the types of pain? 3. How to prevent injury? 3.1 Warm-ups: a must 3.2 Start slow 3.3 Variation of physical activities 3.4 Water: before, during and after physical activity
3. Exercise as a group	4. Safety tips for strength training 5. Safety tips for treadmill use

Note: From: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities*. p., 156-165 Baltimore: MD, Paul Brookes. Reprinted with permission.

Table A22

Building Commitment Evaluation Tool

Evaluation Questions	Very Helpful (4)	Helpful (3)	Fairly Helpful (2)	Not helpful (1)	I don't know (0)
Discussions wants and needs Pain and Physical Activity					
Group Exercise					
Wrap up					

From: "Evaluation Tool" by Dela Cruz, Y. (2014)

Table A23

Building Good Practices, Healthy Attitudes

Lesson	Contents
Activity: Group Discussion/Reflection Duration: 1 hour Wrap-up: 15 minutes	
1. Sleep and physical activity	1. Why is sleep important? 2. How much sleep do you need? 3. What kind of things can keep you up at night? 4. Does exercise give you good night's sleep? 5. Helpful hints for good sleep
2. Negotiation and Compromise	1. What is negotiation? 2. When is negotiation used? 3. Negotiation skills 4. Vignettes of negotiation
3. Illness and Exercise	1. Should you exercise when you are sick? 2. When can you start to exercise again?
4. Assessment of goals	1. Am I meeting my goals? 2. Identify one's plan in staying physically active 2.1 Identify three goals 2.2 Identify steps in reaching the goals 2.3 Identify commitment plan 2.3.1frequency of exercise 2.3.2types of activity that will be done 2.3.3 exercise preferences: alone versus group 2.3.4 venue of exercise 2.3.5 plan for the days that you do not feel like exercising
5. Rewarding one's self	
Take home assignment: **Advance Reading: Three Sample Workouts (p.317-330)**	1. Rewards for achieving goals

From: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities*, p., 166-185.Baltimore: MD, Paul Brookes. Reprinted with permission.

Table A24

Building Good Practices, Healthy Attitudes Evaluation Tool

Evaluation Questions	Very Helpful (4)	Helpful (3)	Fairly Helpful (2)	Not helpful (1)	I don't know (0)
Discussions sleep and physical activity Negotiation and Exercise					
Illness and Compromise					
Assessment of Goals					

From: "Evaluation Tool" by Dela Cruz, Y. (2014)

Table A25

Flexibility, Aerobic, Balance, and Strength Exercises (FABS)

Lesson	Contents
Activity: Group Discussion/Reflection Duration: 1 hour Wrap-up: 15 minutes	1. Goal of exercise program 1.1 Warm ups 1.2 FABS 1.3 Cool Downs
1. 12-week Exercise Program	2. Frequency
2. Group activity: Return demonstrations of each sampler of workout	
Workout 1: Circuit Training "Requires No Equipment"	1. Steps 1.1 Warm-up/stretching 1.2 Game 1.3 Cool-down/stretching 2. Description of exercises 2.1 Arm Circles (Flexibility) 2.1.1 Purpose 2.1.2 Steps 2.2 Seated Y Sit (Flexibility) 2.2.1 Purpose 2.2.2 Steps 2.3 Wall Sits (Strength) 2.3.1 Purpose 2.3.2 Steps
Workout 2: Inexpensive and Portable Equipment "Using Exercise Bands"	2.4 Jumping Jacks (Aerobics) 2.4.1 Purpose 2.4.2 Steps 2.5 Sit-Ups 2.5.1 Purpose 2.5.2 Steps 2.6 Jogging in Place or Marching in Place 2.6.1 Purpose 2.6.2 Steps 2.7 Modified push-ups (Strength) 2.7.1 Purpose 2.7.2 Steps 2.8 Anytime/Anywhere balance 2.8.1 Purpose 2.8.2 Steps
1. Flexibility	
2. Aerobic	
3. Balance	1. Sunshine circles 1.1 Purpose 1.2 Steps 2. Diagonal chop

	2.1 Purpose 2.2 Steps
4. Strength	3. Arm circles 3.1 Purpose 3.2 Steps 4. Seated Y sit 4.1 Purpose 4.2 Steps
Workout 3: Inexpensive and Portable Equipment **"Using weighted Bars"**	1. Jumping jacks 1.1 purpose 1.2 steps 2. High kicks 2.1 purpose 2.2 steps
1. Flexibility	1. Stand on one foot 1.1 purpose 1.2 steps
	1. Squat with exercise band 1.1 purpose 1.2 steps 2. chest press 2.1 purpose 2.2 steps 3. shoulder press 3.1 Purpose 3.2 Steps 4. Two-way shoulder raise 4.1 Purpose 4.2 Steps
2. Aerobic	1. Good mornings 1.1 Purpose 1.2 Steps 2. Arm circles 2.1 Purpose 2.2 Steps 3. Toe touches 3.1 Purpose 3.2 Steps 4. Self-hug 4.1 Purpose 4.2 Steps
3. Balance	
4. Strength	5. Seated butterfly stretch 5.1 Purpose 5.2 Steps
	1. March in place 1.1 Purpose 1.2 Steps
	2. Walk Briskly 2.1 Purpose 2.2 Steps
	1. Anytime/Anywhere

	1.1 Purpose 1.2 Steps 1. Squat with weighted bar 1.1 Purpose 1.2 Steps 2. Chest Press 2.1 Purpose 2.2 Steps 3. Shoulder Press 3.1 Purpose 3.2 Steps 4. Bicep Curl with weighted bar 4.1 Purpose 4.2 Steps
NB: Take home assignment: Review Sampler of Exercises for Adults Aging with I/DD (p.331-353)	

Note. From: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities*, p., 317-330. Baltimore: MD, Paul Brookes. Reprinted with permission.

Table A26

FABS Evaluation Tool

Evaluation Questions	**Very Helpful (4)**	**Helpful (3)**	**Fairly Helpful (2)**	**Not helpful (1)**	**I don't know (0)**
Concepts of FABS					
Discussion of Sample of Workouts					
Return Demonstrations for sample of exercises					
Assessment of Goals					

From: "Evaluation Tool" by Dela Cruz, Y. (2014)

Table A27

FABS: A Sampler of Exercises for Adults with I/DD

Lesson	Contents
1. Helpful tips 2. Health benefits of stretching 3. Set-up 4. Facts about flexibility	
<u>Morning Session</u>	
1. Flexibility	1. Floor stretches 2. Side to neck stretch 3. Neck rotation 4. Wrist stretch 5. Triceps stretch 6. Triceps stretch (modified) 7. Shoulder stretch 8. Shoulder rotation 9. Chest stretch 10. Upper back stretch 11. Low back stretch 12. Gluteal stretch 13. Butterfly stretch 14. Hamstrings 15. Hamstrings (modified) 16. Alternative hamstring stretch 17. Standing quadriceps stretch 18. Quadriceps (floor) 19. Knee flexion stretch 20. Double hip rotation 21. Single hip rotation 22. Calf stretch 23. Ankles
<u>Afternoon Session</u> 1. Aerobic Training 1.1 Health benefits 1.2 Set-up	1. Jumping jacks 2. Jogging in place 3. Swimming/rowing machine 4. Stepper 5. Aerobic steps 6. Cycling 7. Stair climbing 8. Cross trainer
2. Balance training 2.1 Benefits 2.2 Set-up	1. Plantar flexion 2. Knee flexion 3. Hip flexion 4. Hip extension 5. Side leg raise 6. Anytime/Anywhere 7. Balance board
3. Strength Straining 3.1 Benefits 3.2 Set-up	1. Sidearm raises 2. Chair stand 3. Biceps curls 4. Shoulder press

5. Seated row 6. Reverse fly 7. Shoulder flexion 8. Plantar flexion 9. Triceps extension 10. Knee flexion 11. Hip flexion 12. Knee extension 13. Hip extension 14. Side leg raise

Note. From: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities*. 331-354. Baltimore: MD, Paul Brookes. Reprinted with permission.

Table A28

FABS Sampler Evaluation Tool

Evaluation Questions	**Very Helpful (4)**	**Helpful (3)**	**Fairly Helpful (2)**	**Not helpful (1)**	**I don't know (0)**
Concepts of FABS					
Discussion of Exercise for aging adults with I/DD					
Return Demonstrations for sample of exercises					

From: "Evaluation Tool" by Dela Cruz, Y. (2014).

Table A29

Keeping My Program Going

Lesson	Contents
Activity: Group Discussion/Reflection Duration: 1 hour Wrap-up: 15 minutes	
1. Restructuring the Environment	1. Strategies to restructure environment to support physical activity among clients with DD
2. Review Barriers and Assessment of health practices	1. Review "Getting Past Barriers" (p.189) 2. Review" How Am I doing?" (p. 191-192)
3. Staying on Track	1. Review "Six Rules to Stay on Track" (p. 195)
4. Walking	1. Walking as an exercise 1.1 Benefits 1.2 Positive effects 2. Steps in walking as a physical activity

Note. From: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities*, p., 187-196 Baltimore: MD, Paul Brookes. Reprinted with permission.

Table A30

Keeping My Program Going Evaluation Tool

Evaluation Questions	Very Helpful (4)	Helpful (3)	Fairly Helpful (2)	Not helpful (1)	I don't Know (0)
Restructuring the environment Reviews "Getting past barriers" "How Am I doing?" "Six rules to Stay on Track" Walking as an Exercise Assessment of goals					

From: “Evaluation Tool” by Dela Cruz, Y. (2014)

Table A31

Creating an Exercise Video

Lesson	Contents
Activity: Group Discussion/Reflection Duration: 1 hour Wrap-up: 15 minutes	
1. Build team into two groups	1. Create an exercise video 1.1 Type of exercises you would like to do on the tape (stretches, warm-ups, aerobics, cool-downs)
2. Presentation of two groups	1. Role play exercise built by each group 1.1 Summarize the components of the exercise program 1.2 Integrate physical activity in a variety of places
3. Summarize two presentations	1. Evaluate participation 2. Evaluate content of exercise video 3. Offer support 4.

Note. From: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities, p., 196-198.* Baltimore: MD, Paul Brookes. Reprinted with permission.

Table A32

Creating an Exercise Video Evaluation Tool

Evaluation Questions	**Very Helpful (4)**	**Helpful (3)**	**Fairly Helpful (2)**	**Not Helpful (1)**	**I don't Know (0)**
Creation of exercise video among each group					
Presentation of exercise activities by each group					
Evaluation of Presentations					

From: "Evaluation Tool" by Dela Cruz, Y. (2014)

Table A33

Group Discussion/Reflection

Lesson	Contents
Activity: Group Discussion/Reflection Duration: 1 hour Wrap-up: 15 minutes	
1. Review Exercise Goals	1. Connecting with friends and family members 1.1 Regular workout partner 1.2 Role modeling 1.3 Self-advocacy
2. Review important concepts	1. Health 2. Things to do before exercise 3. Benefits of exercise and good nutrition 4. Rights and responsibilities in maintaining an exercise program
3. Marketing the Health Matters Class	1. Discuss advertisement flyer 1.1 Create an advertisement flyer 1.2 Present advertisement flyer

Note. From: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities*, p., 199 Baltimore: MD, Paul Brookes. Reprinted with permission.

Table A34

Group Discussion/Reflection Evaluation Tool

Evaluation Questions	Very Helpful (4)	Helpful (3)	Fairly Helpful (2)	Not helpful (1)	I don't know (0)
Review of Goals and Health Concepts Creation of Advertisement Flyer					

From: "Evaluation Tool" by Dela Cruz, Y. (2014)

Table A35

Finale

Lesson	Contents
FINALE: DSPs' Graduation to the Program 1. Completion of the education program 2. Distribution of certificates Overall Evaluation from DSP participants Leaderships' Remarks Action Plans: Teach Health Matters Class in accordance to education program template as agreed by DSPs and approved by AID leadership	Celebration of accomplishments

Note. From: Marks, B., Sisirak, J., & Heller, T. (2010). *Health matters: The exercise and nutrition health education curriculum for people with developmental disabilities*, p., 199 Baltimore: MD, Paul Brookes. Reprinted with permission.

Table A36

Final Evaluation Tool

Evaluation Questions	Very Helpful (4)	Helpful (3)	Fairly Helpful (2)	Not helpful (1)	I don't know (0)
Overall concepts of the education program					
Group discussions and activities					

From: "Evaluation Tool" by Dela Cruz, Y. (2014)

Appendix B: Organizational Resources Supporting Health Promotion

	Strongly Disagree (1) And Disagree (2)	Agree (3) And Strongly Agree (4)	Don't Know	Mean
I have enough fitness-related supplies to do physical activities with clients [total n=125] [valid n=125]	12.80%(16) 27.20%(34) 40% (50)*	36.80% (46) 9.60% (12) 46.40% (58)*	13.60% (17)	2.16
I have support from my manager to do health promotion activities [total n=125] [valid n= 124]	5.65% (7) 10.48% (13) 16.13% (20)*	52.42% (65) 18.55% (23) 70.97% (88)*	12.90% (16)	2.58
I have support from my coworkers to do health promotion activities [total n=125] [valid n=124]	5.65% (7) 16.13% (20) 21.78% (27)*	54.84% (68) 11.29% (14) 66.13% (72)*	12.10% (15)	2.48
My workplace offers trainings on health promotion activities to people with I/DD [total n=125] [valid n=125]	8.00% (10) 20.80% (26) 28.80% (36)*	48.00% (60) 10.40%(13) 58.40% (73)*	12.80% (16)	2.35
My workplace offers trainings on health promotion activities for staff [total n=125] [valid n=124]	17.74% (22) 33.87% (42) 51.61% (64)*	26.61% (33) 8.06% (10) 34.67% (43)*	13.71% (17)	1.98
My organization has funding (monies) to do health promotion activities [total n=125] [valid n=124]	12.90% (16) 29.84% (37) 42.74% (53)*	17.74% (22) 4.84% (6) 22.58% (28)*	34.68% (43)	1.45
My organization has adequate staffing to do health promotion activities [total n=125] [valid n=123]	21.95% (27) 33.33% (41) 55.28% (68)*	17.07% (21) 4.88% (6) 21.95% (27)*	22.76% (28)	1.59

* Total scores for both responses

Note. From "Health Matters Assessment Report" by HealthMattersProgram.org (2012), p.2. Reprinted with permission.

Curriculum Vitae

Yurlene Sales Dela Cruz, RN-BC, MSN, DNP(c)

PROFESSIONAL EXPERIENCE

Jesse Brown VA Medical Center/Chicago, Illinois (2010-present)

Nurse Manager

Notable Recognitions:

Initiated the incorporation of Notification of Restriction of Patient's Rights form as part of patient advocacy in the event of crisis intervention.

Initiated: Fall Documentation Algorithm for RNs' usage in the entire medical center.

Champion: Implementation of Notification of Patient's Restricted Rights Documentation in inpatient mental health

Advocated for improved environment design as part of transitioning inpatient mental health in the recovery model of care.

Member - Nationwide Veterans' Health Administration (VHA) Falls Safety Initiative

Member- Nationwide Performance Improvement Audit Inpatient Mental Health Performance Measures

Drug Dependence Treatment Center (DDTC) RN

Notable Recognitions:

Descriptive Study: Common Health Problems in DDTC and its impact to Veterans' Recovery (Award Recipient)

Rush University Medical Center/Chicago, Illinois

Clinical Nurse II (Psychiatry)

Notable Recognitions:

Luther Christman Nursing Clinical Excellence Recipient- 2009

Rush News Contribution: “Nurses are heard and recognized at Rush”

Presence Saints Mary and Elizabeth Medical Center, Behavioral Health Department (2003-2006)

Chicago Lakeshore Hospital/Chicago, Illinois (2005-2006)

The Manor House/Oxford, England (1999-2003)

Gleneagles Hospital/Singapore (1997-1999)

EDUCATION & CERTIFICATIONS

Psychiatric and Mental Health Nursing- Board Certified (From February 7, 2011)

Doctorate in Nursing Practice (Candidate) Current GPA: 3.89

Sigma Theta Tau International: Gamma Phi Chapter

DNP project: A developmental disabilities program: A proposed education program for Direct Support Staff

Walden University, Online Education, Baltimore, Maryland

Master of Science in Nursing (MSN) GPA 4.0

Graduated: August 2010

Benedictine University, Lisle, Illinois

MSN Capstone Project: Marketing Mood Disorder Unit at Rush University Medical Center, Chicago Illinois

Sigma Theta Tau International: Upsilon Lambda Chapter

Diploma in Nursing Counseling Skills

Graduated: April 2001

Institute of Counseling, Glasgow, Scotland, United Kingdom

Master of Arts in Nursing, Major in Psychiatric Nursing

Credit Earned: 36 academic units (ECE GPA equivalent)

University of Sto Tomas, Manila, Philippines

Bachelor of Science in Nursing (BSN)

Graduated: March 1992 (ECE GPA Equivalent)

Saint Paul University, Manila, Philippines