

MOTIVATIONS AND BARRIERS TO HOSPITAL NURSING EMPLOYEE PARTICIPATION IN WORKPLACE WELLNESS PROGRAM

[A QUALITY IMPROVEMENT INITIATIVE]

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Presentation by

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Introduction

- Workplace wellness program for employees, matters
- Prevention of premature deaths, chronic diseases, productivity loss, excessive healthcare costs, loss of income or family earnings, and other social and economic concerns
- Workforce fitness, directly or indirectly, impact employers, shareholders, employees, family members, the community, and society as a whole
- Workforce fitness is important to both companies and workers, yet the overall fitness level of the U.S. workforce appears low and in decline.

Background

- Physically active jobs now make up less than 20% of occupations while sedentary work has increased 83% since 1950 in the United States
- According to the CDC, 85% of America's workforce is paid for sitting at a desk all day
- As a nation, we are lot more productive but lot less physically active
- Despite significant health education and knowledge among healthcare professionals, it often does not translate into their own healthy behaviors
- Hospital employees, according to *Truven Health Analytics* study, are less healthy than the general workforce and cost more in healthcare spending.

Clinical Needs Assessment

- A core objective of *Healthy People 2020* and an important public health goal is to increase the number, quality, and types of health promotion programs at workplaces, especially smaller worksites
- According to the CDC's *Workplace Health Model*, the workplace is an important setting for health protection, promotion, and disease prevention programs since “*workplaces are to adults what schools are to children*”

Clinical Significance

- According to CDC: Adults spend a significant amount of waking hours at their workplaces
- Healthcare providers play an integral role in promoting health-enhancing behaviors
- Healthcare providers often exhibit unhealthy lifestyle behaviors with work-related stress identified as one of the most frequently-cited reason
- *Truven Health Analytics* study found that U.S. hospital employees were less healthy than the general workforce, costs 9% more in healthcare spending, had higher utilization of emergency dept., and hospital employees & their dependents were 5% more likely to be hospitalized than the overall U.S. workforce
- There is wide support in the literature for a need for health promotion and workplace wellness programs for hospital employees.

Objectives of the QI Study Project

Two objectives were determined for this *Quality Improvement DNP Scholarly Study Project* to answer the stated question of inquiry:

- To identify how hospital-based workplace wellness programs are perceived by hospital nursing employees by gathering pertinent information to answer the study project's question of inquiry; and
- To identify perceived motivations for and barriers to participation through the development of an interventional survey instrument called '*Wellness Participation Survey*'

Purpose of the QI Study Project

The purpose of this *Evidence-Based Quality Improvement DNP Scholarly Study Project* was:

To identify the perceived motivations for and barriers to participation in hospital-based established workplace wellness programs faced by hospital nursing employees.

PICOT Statement/Question of Inquiry

What perceived motivations and barriers associated with participation in hospital-based established workplace wellness programs can be identified through a *Wellness Participation Survey* administered to hospital nursing employees?

- **Population:** (P) Hospital nursing employees
- **Interventions:**(I) Implementation of the ‘*Wellness Participation Survey*’
- **Comparison:** (C) Status
- **Outcome:** (O) Identification of perceived motivations and barriers associated with participation in workplace wellness programs
- **Time:** (T) March-April 2019

Key Terms

- *Workplace wellness programs*
- *Program participation*
- *Hospital nursing employees*
- *Motivations for participation*
- *Barriers to participation*

Review of Literature

- TWU Online Library: Scholarly, peer-reviewed, evidence-based, academic journal articles, authoritative governmental sources, book chapters, reports from non-governmental organizations, policy papers, etc.
- Unpublished and informally published works such as internet message boards, social media, wikis, blogs, etc. were excluded.
- Due to a dearth of relevant literature material, there was a need to expand the publication time range of the literature search from year 2000 to the present.

Why Workplace Wellness Programs?

- Can reach large segments of the population;
- Share a common purpose & common culture;
- Communication with workers is relatively straightforward;
- Social and organizational support to change unhealthy behaviors;
- Can introduce policies, procedures, and practices to promote health;
- Workplaces can offer financial or other incentives to gain program participation;
- Workplaces tend to foster long-term relationships with their employees.

Wellness Programs in Hospital Setting

As a result of a 2011 Survey, the American Hospital Association featured seven recommendations focused on “*wellness*”:

- Serve as a role model of health for the community;
- Create a culture of healthy living;
- Provide a variety of program offerings;
- Provide positive and negative incentives;
- Track participation and outcomes;
- Measure for return on investment; and
- Focus on sustainability.

Determinants/Motivations for Participation

Review of literature found the following:

- Positive incentives were strong determinants of participation
- Worksite gym, personal coach, and discounts in other programs in exchange for exercise
- Well-designed comprehensive workplace wellness program
- Age and gender also appeared to be predictors of participation
- Stress management and weight control.

Motivations for Participation

- *Extrinsic*: Use of incentives
- Incentives can be financial bonuses, reduction in insurance premiums, paid time off from work, t-shirts, gym bags, gift cards, and discounts but most researchers believe that incentives in the form of cash/gift cards are most effective
- *Intrinsic*: Good sleep, better stress management, absenteeism, higher productivity, professional camaraderie, and employee morale.

Barriers to Participation

Hospital-based wellness program is challenged by:

- Round-the-clock staffing,
- Lack of flexibility in the schedules of clinical employees,
- Long hours at work, nature of work, having a second job, and wellness activities not being appealing or enjoyable
- Lack of incentives, staff resources, funding, participation on the part of high-risk employees, management support
- Lack of an onsite dedicated wellness staff.

Theoretical Framework

- The Transtheoretical Model (TTM) was the theoretical & conceptual framework
- Developed by Prochaska and DiClemente in the 1970s and 1980s, to measure behavioral readiness for healthy lifestyle change; six stages of changes:
 - *pre-contemplation*
 - *contemplation*
 - *preparation*
 - *action*
 - *maintenance* and *termination*
- Review of literature supported that workplace wellness programs can lead to change at both the individual (employee) and the organization (employer) levels.

Project Design & the *Wellness Participation Survey*

- A Survey Questionnaire was developed by the investigator as an interventional instrument, named *Wellness Participation Survey* to answer the PICOT question of inquiry using a set of 16 questions
- The *Wellness Participation Survey* was used to identify:
 - Demographics of the respondents
 - Perception of wellness programs
 - Perceived motivations for and barriers to participation
- The *Wellness Participation Survey* was designed with the help of and on an online platform, *Research Electronic Data Capture (REDCap)*.

Development of the Survey Instrument

- There were no existing survey instruments that would support this QI Study Project, which indicated the need for the investigator to develop a survey instrument
- The investigator developed the survey instrument, named *Wellness Participation Survey*
- The survey instrument was reviewed by an expert panel of six healthcare research professionals
- This same panel of experts also tested the Content Validity Index of the developed survey instrument, which was approved by the university statistician.

Survey Instrument

- The survey instrument - *Wellness Participation Survey* - comprised of 16 questions
- The first five questions were related to demographic characteristics which were *categorical* in nature
- There were closed-ended questions with alternatives to choose among “yes,” “no,” and “do not know” answers and a few checklist type of questions for respondents to check all items that applied
- The *Wellness Participation Survey* also included two five-point Likert Scale *continuous* in nature questions
- Respondents and their identities were kept anonymous to the investigator including their individual responses.

Inclusion & Exclusion Criteria

- *Included*: Advanced Practice Providers and Registered Nurses engaged in clinical services who were employed at the selected two large public teaching hospitals located in the hospital district of a metropolitan city in the Southwestern United States – one state funded and the other county funded
- *Excluded*: Other employees classified as non-clinical nursing staff who are not involved in direct patient care and hospital administrative staff were excluded from participation in this QI Study Project.

Implementation & Data Collection

- An exempt *eIRB* approval as well as performance site approval to conduct QI study related activities were obtained
- A power analysis using G*Power 3.1.9 was completed; it was determined that a minimum of 67 respondents out of a sample size of 120 eligible participants (n) would be necessary to ensure meaningful estimation of the power and the results to be statistically significant. Actual responses received were 87 from both hospitals
- The interventional survey instrument was disseminated via the email systems of the two selected hospitals by the nursing administration
- The data collection was done electronically through *REDCap* collection website where respondents submitted their responses. Collected data was downloaded in encrypted format and exported into Microsoft Excel spreadsheets for statistical analysis in IBM SPSS Statistics 25 for Windows aided by professional statisticians.

Timeline of Activities

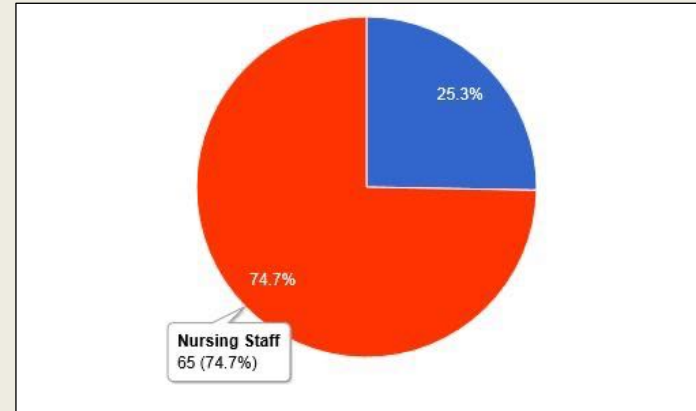
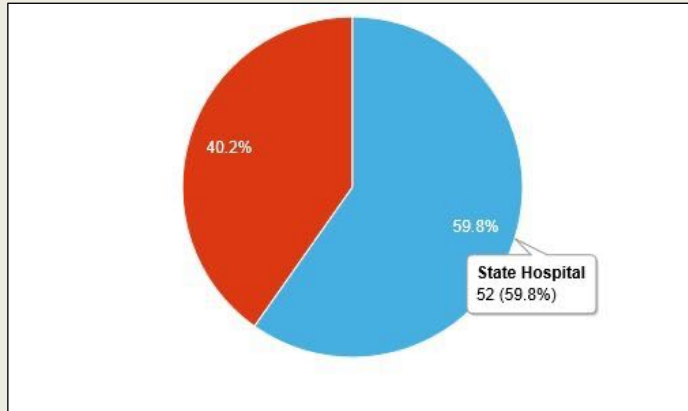
- A Non-Regulatory Research Request (NRR) Form (Form Y2) for *IRB* Approval submitted on 12/31/2018
- A *REDCap* Survey login was requested and access was granted on 12/31/2018
- A Senior Regulatory Associate from Human Research Protection Program Office was assigned to review NRR on 1/14/2019 and the Survey Questionnaire for their review process
- On 1/15/19, it was determined that this proposed QI study was a Category 2 Exempt Research Study which required an application submission to *eIRB* and *Velos* for further processing
- The investigator submitted an application for the study to *eIRB* and *Velos* on 1/17/2019
- The proposed study was approved by a faculty sponsor and chair, internal medicine department on 1/18/2019
- The QI Study Project was approved as an exempt study on 1/28/2019
- *State Hospital* performance site approval for study-related activities was granted on the same day of the application on 1/28/2019. *County Hospital* site was approved on 02/08/2019
- Survey was transmitted to eligible hospital nursing employee participants on 03/22/2019
- Survey was closed on 03/29/2019 upon receipt of adequate number of responses; which was 87.

Data Analyses and Results

- Demographics
- Perceptions of availability of WWP to employees/families
- Perceptions of number of WWP offered
- Perceptions of level of availability of WWP
- Perceptions of incentives vs penalties and if participation increases as a result of incentives
- Perceptions of barriers to participation
- Perceptions of motivations for participation

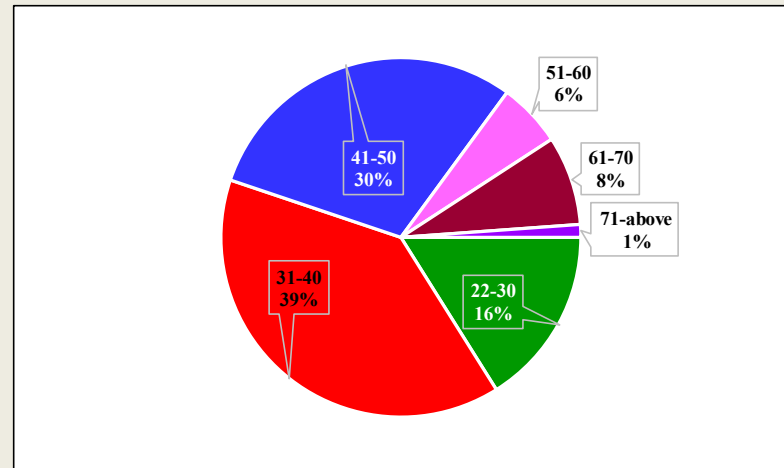
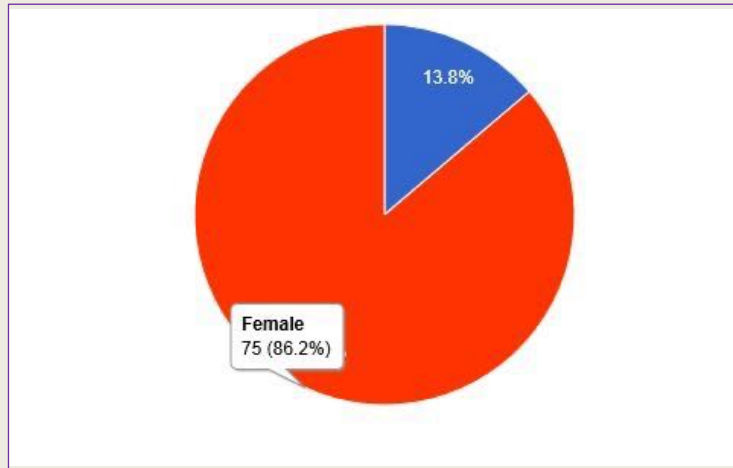
Demographics

- The *Wellness Participation Survey* instrument was sent to a total 120 eligible hospital nursing employee participants. A total of 87 participants responded.
- Of the 87 respondents; 52 (60%) worked at the state hospital, and 25 (40%) worked at the county hospital. Out of the total of 87 respondents; 65 (75%) responses were from nursing staff (RNs) and 22 (25%) responses were from APPs.



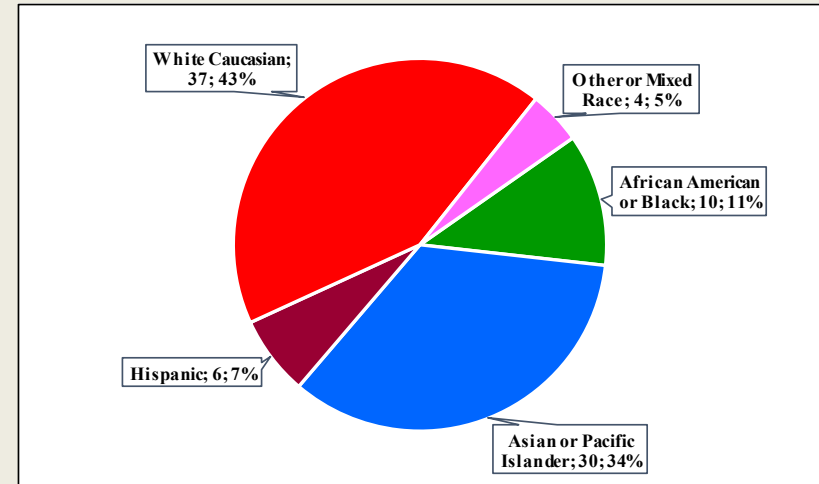
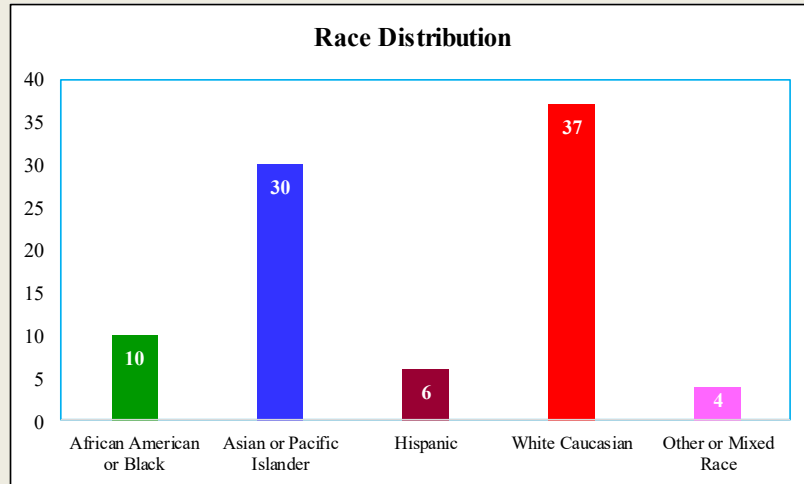
Demographics *(continued)*

- Gender: Frequency distribution: Male (12, 13.8%), Female (75, 86.2%)
- Age Group: Frequency distribution: 22-30 (14, 16%), 31-40 (34, 39%), 41-50 (26, 30%), 51-60 (5, 6%), 61-70 (7, 8.0%), 71-above (1, 1%)



Demographics *(continued)*

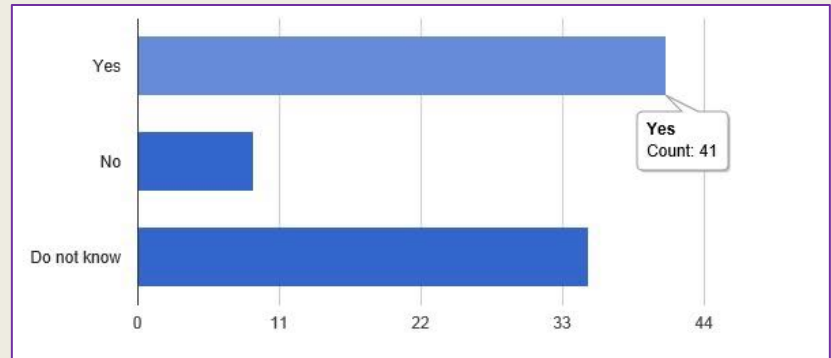
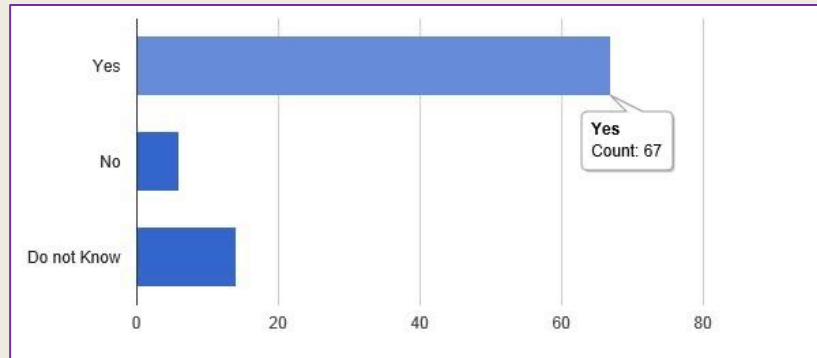
Race: Frequency distribution: African American or Black (10, 11%), Hispanic (6, 7%), **White Caucasian (37, 43%), Asian or Pacific Islander (30, 34%), Other or Mixed Race (4, 5%)**



Perceptions of Availability of WWP to Employees/Families

- Employees: Majority of respondents 67 (77%) were aware, 23 % not aware
- Families: Less than half of the respondents (41.2% of the 85 who responded) were aware. Majority (59%) either erroneously said “No” or “Did not know.”

Frequency Distribution of Responses to Perception of Availability for Employees & Families



Perceptions of Number of WWP Offered

Sum of Programs: The perceived number of wellness program benefits available is described using summary statistics. The county hospital offered 17 program benefits and the state hospital offered 24 program benefits, respectively.

Summary Statistics for Perceived Number of Wellness Programs Available

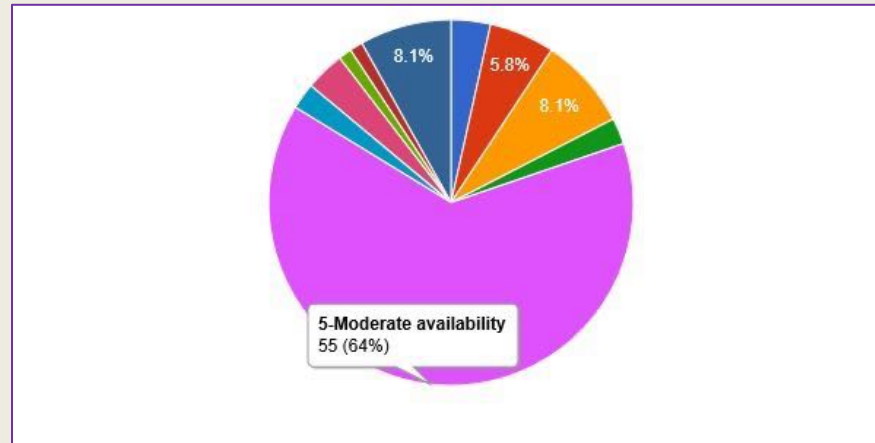
Hospital Type	Mean	Median	Standard Deviation	Minimum	Maximum
County Hospital	8.80	7	6.116	1	19
State Hospital	13.12	15.5	6.419	1	20

Perceptions of Number of WWP Offered *(continued)*

- The average and median number of perceived program benefits was lower than actual number for both county and state hospitals
- The average and median number of perceived program benefits at the county hospital was lower than for the state hospital, which reflected the true situation
- No respondent selected 0 program benefits for either
- No respondent selected all 24 benefits listed on the survey; in fact, the highest number perceived for state hospital was 20, which was less than true number of 24 available program benefits.

Perceptions of Level of Availability of WWP Offered

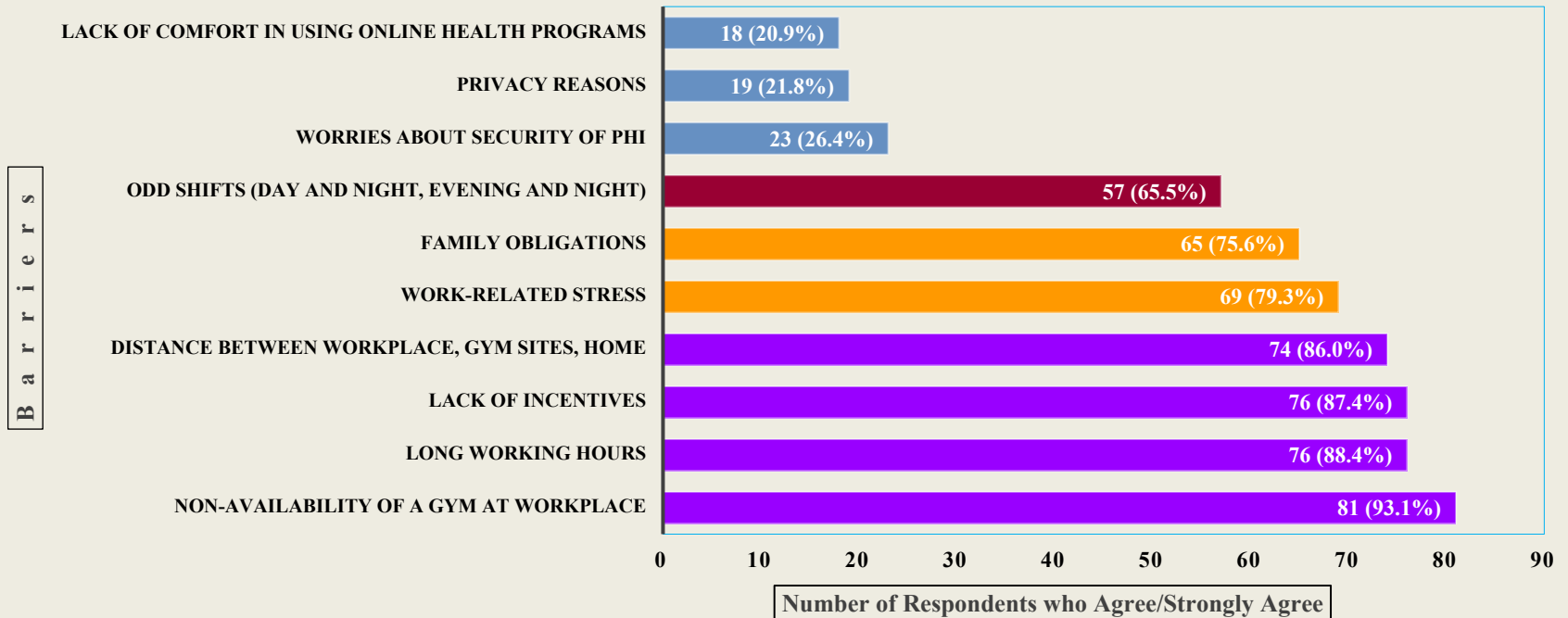
- **Mann-Whitney U Test:** No statistically significant differences were found in any of the demographic variables. This Pie Chart shows that majority of the respondents chose “5” (“moderate availability”) for the level of availability of wellness programs.



Perceptions of Incentives vs Penalties

- Descriptive statistics was used to identify the perceptions toward provision of incentives for participation and penalties for non-participation
- Chi-Square Test was performed to see if there is a significant difference in perceptions with demographic variables
- No statistically significant differences were found in the responses towards positive incentives and penalties at 0.05 level of statistical significance for demographic variables
- Asian or Pacific Islander hospital nursing employees were significantly more likely than White Caucasians to correctly answer that there were no penalties for non-participation in hospital-based wellness programs at 0.05 level of statistical significance.

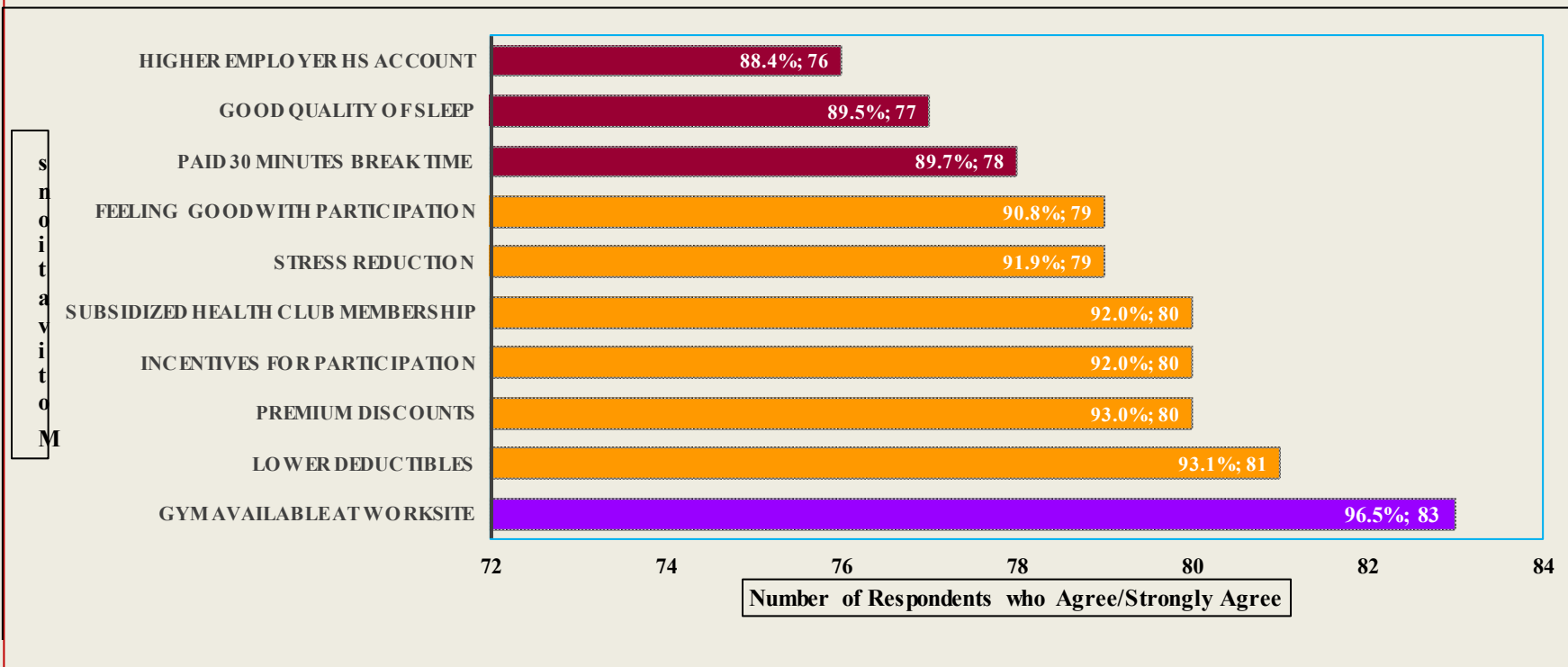
Perceptions of Barriers to Participation



Perceptions of Barriers to Participation *(continued)*

- The pattern of agreement with barriers was not significantly different for any of the demographic variables
- Highly ranked (frequency) and strongly agreed barriers (> 80-91%)
- Non-availability of a gymnasium at workplace for employees
- Long working hours
- Lack of incentives, and
- Work-related stress were ranked as highest perceived barriers by both APPs and nursing staff (RNs).

Perceptions of Motivations for Participation



Perceptions of Motivations for Participation *(continued)*

- The pattern of agreement with motivations was not significantly different for any of the demographic variables
- Highly ranked (frequency) and strongly agreed motivations (> 91%)
- The most highly ranked motivation was availability of gymnasium at worksite (96.5%); the lowest ranked motivation was higher employee Health Savings Account (88.4%)
- The difference between the highest and lowest ranked motivations for participation was not that large, subjectively speaking (especially compared to the rankings of barriers to participation).

Summary of Data Analyses

- The *Wellness Participation Survey* instrument was sent to a total 120 eligible hospital nursing employee participants. A total of 87 participants responded
- Out of the total of 87 respondents, 52 worked at the state funded hospital and 25 worked at the county funded hospital
- Out of the total of 87 respondents, 65 (75%) responses were from clinical nursing staff and 22 (25%) responses were from advanced practice providers
- More females responded than males [Female (75, 86.2%); Male (12, 13.8%)]
- Max responses were from age groups 31-40 and 41-50 years
- White Caucasian and Asian or Pacific Islander response rate was higher compared to other ethno-racial background.

Summary of Data Analyses *(continued)*

- Employees: Majority of the respondents 67 (77%) were aware, 23 % were not aware of established wellness programs available to employees
- Families: Less than half of the respondents (41.2% of the 85 that responded) were correctly aware. The majority either erroneously said “No” or “Did not know”
- No respondent selected all 24 programs. In fact, the highest number perceived for state hospital was 20, which is less than the actual number of 24 available programs
- Free Flu shots as WWP (84, 96.6%)
- Tobacco-free campus (70, 80.5%)
- Employee Assistance Program (67, 77.0%)
- Wellness newsletter (46, 52.9%)
- A total of 85 out of 87 said “Yes” for an increased participation with incentives.

Summary of Data Analyses *(continued)*

- Gift cards and cash were more popular in the two middle age groups (31-40 and 41-50 years) than they were in the youngest and oldest age groups
- Travel tickets for vacation were less popular in the oldest age group when compared to the other groups
- Highly ranked and strongly agreed barriers (> 80-91 %)
- Non-availability of a gymnasium at workplace for employees
- Long working hours
- Lack of incentives, and
- Work-related stress is ranked highest perceived barriers by both nursing staff and the APPs
- The most highly rated motivation was gymnasium available at worksite (96.5%); the lowest rated motivation was higher employer health savings account (88.4%).

Limitations of the QI Study Project

- Findings of the study may not be representative of all nursing employees at the two selected public teaching hospitals
- Survey administration and participant eligibility from specific hospital units were decided by the hospital administration
- Respondents were limited to those who voluntarily participated in the survey questionnaire
- Assumed that the participants answered the questions based on the intended purposes of each question in the survey instrument
- Assumed that all respondents were honest in their responses

Conclusions

- This QI Study Project gathered important information about the perceptions of hospital nursing employees, about the level of availability and motivations for and barriers to participation in established workplace wellness programs
- This information may be vital to decision-making to improve motivations for participation and to reduce barriers to make healthy behavior changes through established hospital-based workplace wellness programs
- A successful employer sponsored wellness program requires employee participation; therefore, careful consideration should be given to addressing the perceived behaviors and preferences among hospital nursing employees to improve motivations for participation and to improve health outcomes.

DNP Essentials Satisfied by the Project

- Essential I: Scientific underpinnings for practice
- Essential II: Organizational and systems leadership for QI and systems thinking
- Essential III: Clinical scholarship and analytical methods for evidence-based practice (EBP)
- Essential V: Healthcare policy for advocacy in healthcare
- Essential VII: Clinical prevention and population health for improving the nation's health
- Essential VIII: Advanced nursing practice role and education

Dissemination

- This *QI Initiative: Motivations and Barriers to Hospital Nursing Employee Participation in Workplace Wellness Program* had been accepted for public presentation in two forums
- The investigator made a Poster Presentation of the QI Study Project at the North Texas Nurse Practitioners' 2019 Annual Spring Conference on Saturday, April 6, 2019 held at the Wyndham Dallas Suites in Dallas, Texas during the poster sessions in the 9:00 AM hour and at the 3:00 PM hour
- The investigator had also been invited to make a Platform Presentation at the 2019 TWU Student Creative Arts & Research Symposium scheduled for Wednesday, April 10, 2019 at 9:00 AM in the Administrative & Conference Tower (ACT #301) in the TWU Denton Campus.

Acknowledgement & Thanks

I am thankful and I gratefully acknowledge the guidance, assistance, encouragement, and support, I have received from the following individuals in completing this *DNP Scholarly Project*:

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