

**NURSE MANAGERS' INVOLVEMENT IN DECISION-
MAKING AND ASSOCIATED FACTORS IN SELECTED
GOVERNMENT HOSPITALS, ADDIS ABABA, ETHIOPIA,
2021.**

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**A RESEARCH THESIS SUBMITTED TO THE SCHOOL OF
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**ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES
SCHOOL OF NURSING AND MIDWIFERY
MASTER OF SCIENCE RESEARCH THESIS**

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STATEMENT OF DECLARATION

By my signature below, I declare and affirm that this thesis is my work. I have followed all ethical principles in the preparation, data collection, data analysis, and completion of this thesis. All scholarly matter that is included in the thesis has been given recognition through citation. I affirm that I have cited and referenced all sources used in this document. Every effort has been made to avoid plagiarism in the preparation of this thesis.

This thesis is submitted in partial fulfillment of the requirement for an MSC degree in Adult Health Nursing from the Addis Ababa University, College of Health Sciences, School Nursing and Midwifery, Department of Nursing. The thesis is deposited in the Addis Ababa University Digital Library and is made available to local, national, and international scientific communities.

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LIST OF ABBREVIATIONS/ACRONYMS

AAHB	Addis Ababa health bureau
AAU	Addis Ababa University
AOR	Adjusted odds ratio
ART	Antiretroviral therapy
Assist.	Assistance
BSc	Bachelor of Science
CI	Confidence interval
COR	Crude odd ratio
COVID-19	Coronavirus Disease 2019
CSAE	Central Statistical Agency of Ethiopia
DM	Decision making
ENA	Ethiopian Nursing association
ER	Emergency room
ETB	Ethiopian Birr
ICU	Intensive care unit
IRB	Institutional Review Board
MOH	Ministry of health
MSc	Master of science
OPD	Out-patient Department
OR	Operation Room/ odd ratio
PI	Principal Investigator
SPSS	Statistical Package for the Social Sciences
TASH	Tikur Anbessa Specialized Hospital

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ABSTRACT

In the healthcare system Nurse managers' involvement in decision-making had boundless value to preserve cost-effective service and safe patient care. The nurse manager is driving power to ensure optimal health care service, despite this Nurse managers' decision-making involvement and associated factors were not well studied. This study aims to assess Nurse managers' decision-making involvement and associated factors in selected government hospitals in Addis Ababa, Ethiopia, 2021. Institutional based cross-sectional study was conducted among 176 Nurse managers in Addis Ababa selected government hospitals with a response rate of 168 (95.5%). The total sample size is allocated proportionally. A systematic random sampling technique was used. Data collection was done by using a structured self-administered questionnaire and checked, cleaned, entered into EP info version 7.2, and exported to SPSS software version 25 for analysis. Binary logistic regression model using bivariable and multivariable analysis method and $P < 0.25$ was the cut-off point to consider variables into multivariable from bivariable. A P-value of < 0.05 was used to determine the predictor variables between variables with a CI of 95%. Majority, 97(57.7%) were not involved in general decision-making. Those Nurse managers who work in matron positions had 10 times good decision-making involvement than those Nurse managers who work as a head nurse: (AOR = 10.00, 95% CI: 1.14-87.72, $P = 0.038$). Those Nurse managers who had managerial support had 5 times good decision-making involvement than those Nurse managers who lack managerial support: (AOR=5.29, 95% CI: 1.208-23.158, $P=0.027$). Those Nurse managers who had got feedback for their decision-making involvement had 7.7 times good decision-making involvement than those Nurse managers who lack feedback: (AOR= 7.70, 95% CI: 2.482-23.911, $P= 0.000$).

The study result showed that majority of Nurse managers had poor involvement in decision-making. MOH, AAHB, and administrators of the hospitals may be needed to improve the decision-making involvement of Nurse managers by providing feedback for their decision-making involvement and supporting them.

Keywords: Nurse managers, involvement in decision-making, decision-making.

CHAPTER ONE

1. INTRODUCTION

1.1. Background

Decision making (DM) is a multipart intellectual, multi-angle and fundamental component of managerial action in an organization, it requires adequate information and experience of investigating the diverse option and choosing the feasible one for effective organizational presentation and resource utilization, decision making is a procedure or longitudinal action that require finding and defining the goals of what we do with good judgment (1). It is a longitudinal process to accomplish the organizational vision, mission and overcome difficulties (2).

Health care decision-making is about best choices on how to allocate resources or about which treatments are the best, medical triaging, selecting affordable intervention (3). It is decision-making in the situation of wide-ranging social relationships of diverse bodies in the public. Health care decisions consider active participation of clients in decision making, recognize and respect health, health care, and life (4). Health care decision-making is the process of gauging the benefits and cost of intervention by considering scientific evidence (5). In the healthcare system, decision-making needs distinct competencies in planning, directing, supervising, and creating a peaceful atmosphere for both the health team and clients (6).

Nursing is an honorable profession and heart of the healthcare system that requires the entire promise of Nurses to provide comprehensive care and alleviate suffering in humankind (7), Nursing is a forward-facing line for cost-effective and safe patient care, to assure this having the right person on the right position is indispensable (6).

Nursing managers need distinct interpersonal skills to advance smart, devoted professionals and resource utilization, to fill the gap in clinical practices, to assure professional independence and to develop educational chances (8), improve the clinical competence of Nurses and subsequently improve the quality of care, Nurse play a critical role in risk assessment and management (9, 10). Effective Nurse managers' decision-making participation has a constructive influence in maintaining effective teamwork, advancing the

working environment, improving satisfaction, reducing the turnover rate, and maintaining a stable and favorable working environment (6,7).

Nurse managers' decision-making involvement have a boundless effect on Nurses' attitude and belief by guiding and inspiring them to attain organizational as well as professional goals and is an essential element for effective and efficient health care provision as well as future professional development and advancement in line with the need (11).

Visionary Nurse managers are driving power for understanding the internal image of the profession, to overcome impacts from different direction and body (12), for the delivery of excellent patient care and reduce medical error, the Nurse Manager is the vital individual who can chief and direct Nursing service department and guarantee quality service delivery (13).

Self-directed Nurse is an essential input to provide unceasing, truthful, advanced, and well-organized patient care, to develop accurate and standardized health policy, to maintain a cost-effective health care system and environment (14).

Nurse managers' decision-making participation had been promoted by positive features and hindered by negative factors, which are present from previous to present in the nursing history, this factor may be personal or organizational (15), However, a limited study had been conducted to investigate these factors.

1.2. Statement of the Problems

The mission and aim of the Nursing profession are on providing respectable care by diagnosing and treating human responses to health and illness, Nurses are exposed to work-related fatigue, stress, burnout, and negligence, due to this Nurse managers had low decision-making participation, and unproportional power-sharing (7), undesirable image, not considered as a profession, and less attention for self-government and independence (16).

An explorative study on Nurse leaders' views on clinical ladders as the strategy in professional development in Norway among Nurse leaders recognized that the majority (76.5%) of Nurse leaders' have no chance to involve in monetary and top-level decision making and have very low encouragement in the use and mobilization of resource (17).

Nurses account for the largest number of other professionals (17, 18), but the absence of chance in decision making involvement at various levels, dearth of the supportive structure, negative image, seeing the profession as incompetent, and work overload highly affect health care decision making involvement (19). Insufficient resources and manpower are factors that extremely affect and cause little administrative decision-making involvement of Nursing managers (13).

Decision making participation among Nurse managers is the character of professional autonomy and practices of one's occupation through one's education and professional identity, but health care organizational factors including non-standard Nurse patient ratio, workload, and nonexistence of clear job description lead to poor decision making involvement among Nurse managers (20).

A study on factors that facilitate head Nurses' autonomy in decision making in Egypt indicate that active and independent involvement of Nurse managers in health care decision making have boundless fruitful effect in the health care system, there are unlimited benefits to health care delivery, but they face various obstacles to participate in decision making (14, 21).

In developing countries, the health care system is not advanced due to the nonexistence of Nurse managers' participation in decision making, despite good competency of managerial and leadership skill, there are professional inequalities that hamper decision-making participation (21).

Nurse managers' decision-making involvement had so many health service benefits including reduce medico-legal error, advance the service and increase client satisfaction. In our country, Ethiopian decision-making involvement of Nurse managers and associated factors are not studied and not determined. Therefore, this study was done to fill this gap.

CHAPTER TWO

2. LITERATURE REVIEW

2.1. Introduction

To get adequate and saturated information in the process of this research thesis development 41 literature were reviewed and cited based on the area of importance.

The nurse manages active involvement in decision making is crucial in modern healthcare facilities (22). Independent and active involvement of Nurse managers in decision-making plays a central role in providing integrated, quality, and cost-effective nursing service (11, 21). The decision-making involvement of Nurse managers is influenced by both positive and negative factors, Negative factors lead to poor Managerial decision-making involvement (14, 17). Low involvement in decision-making among Nurse managers creates undesirable consequences on Nursing care which include high turnover rate, heavy workload, professional burnout, and low-quality health services (18).

2.2. Nurse managers' involvement in decision-making

A national cross-sectional survey conducted in Australia on Nurse managers determined that clinical Nurse managers have high levels (74.3%) of engagement in assorted activities. Lower scores detected that organizational Nurse managers highlight the move to strategy-focused activities that occur as nurses up the management tree (23).

A descriptive study on the assessment of Nurse managers and leadership competency in Finland hospital showed that the Nurse managers most frequently emphasize patient care and teamwork. Nurse managers' who received leadership and management training (60.8%), Nurse managers' commonly knowledgeable in leadership and management were evaluated as relatively good, ranging from 3.68 to 4.06, Nurse manager participation in service initiation and innovation account the lowest score (3.68%) (24).

A cross-sectional correlational study on Nurse Participation in clinical and administrative decisions in the Southeastern United States with response rates between 26% to 50%, indicating that Nurses involved in both clinical and administrative decision, they highly

participated at higher levels of critical thinking in clinical decisions than managerial decisions, but Nurse has low decision-making involvement (25).

Non-experimental quantitative, cross-sectional, descriptive study in Northern California indicated that 50% of their profession was challenging, 45% their profession was a means to gain novel skills and knowledge, and 41% of their profession used their skills, less than 49% stated that they had an acceptable chance to information from highest management, 38%–57% did not have support from managers, 36%–38%) lacked resources to accomplish their managerial job requirements. Only 36% reported that temporary help was readily available when needed (26).

A cross-sectional study conducted on an evaluation of the competencies of primary health care clinic Nursing managers in South African provinces indicates that clinic Nursing managers on different level including leadership and management (8.67%), staff management (8.75%), planning and priority setting (8.6%), and problem-solving (8.83%), financial management with a median score of (7.94%), the lowest involvement for monetary management (supervisor median rating (6.56%), subordinate median rating (7.31%)) (6).

The situation to be addressed, the session in which the decision has to be made, required contributions from colleagues, the complication of the task and the environment, the duration and time it takes to make a decision, availability of resources, the decision-making environment, and personal characteristics are Factors that have both direct and indirect lead poor decisions making involvement (27).

2.3. Factors associated with Nurse managers' involvement in decision-making

2.3.1. Socio-demographic Factors

An integrative literature review in California University indicated that professional, as well as personal experience, had a great correlation with decision-making involvement among Nurse (28).

A descriptive study conducted in Canada identified that work experience had significant relation with the professional value which are highly interrelated with decision-making involvement among Nurses, the more work experience the more involvement in decision making, but not determined the relation with age (21).

A systematic review of both quantitative and qualitative studies in Thailand determined that educational level, age, and work experience had a positive and strong relationship with decision-making involvement (67.5%), but no relation with gender (29).

A cross-sectional descriptive study conducted in South Korea on Nursing managers, mean age 29.2 years, determined that educational level had significant relation with decision-making involvement, but nothing said about marital status and decision-making involvement (30).

A descriptive comparative study on factors facilitating policy development and autonomy of decision making among head Nurses conducted in Egypt identified that from the study participants 49.5% had work experience of 10 to 15 years, work experience had an association with decision-making involvement, gender not determined (14).

A descriptive correlational study on factors affecting decision-making among Nurse managers and its relations to decision-making style in Egypt identified that 37.6% of work experience between 20 to 30 years identified work experience had a positive effect on decision making involvement, ($p \leq 0.05$) (31).

A descriptive exploratory study in Egypt indicated that work experience plays great importance on decision-making involvement (32).

A survey conducted on factors that act as facilitators and barriers to Nurse leader's participation in health policy development in three east Africa countries (Kenya Uganda and Tanzania) determined that work experience and involvement in policy development have a positive association (18).

A descriptive study on the effect of leadership behaviors of Nurse managers on Nurse's work motivation indicated that professional value had a great influence on decision-making involvement (32).

A descriptive-correlational study done in Iran with ($r=0.476$, $P=0.001$) value indicated that regular exercising and physical activities had a significant positive effect on clinical decision-making involvement (33).

2.3.2. Organizational Factors

A systematic review of both quantitative and qualitative studies in Thailand identified that the availability of training programs on management and leadership had a positive association with decision involvement (29).

An investigation in Sweden with a prospective design on health workers indicated that lack of managerial support from top managers is undesirably interrelated with both the managers' health and the cause of low involvement of decisions in health care managers (34).

A descriptive comparative study in Egypt, involvement 91%, support 84%, knowledge and skill 87%, enabling structure 83% determined as positive factors for decision making involvement among Nurse managers' and inadequate resources 88.5%, deficiency of knowledge, skill and support 67%, lack of participation 65.5%, negative image of nursing 54.5% determined as negative factors for the participation of Nurse managers' in decision making (14).

In a descriptive correlational study on Nurse managers in Egypt, 76.5% attended the management training course, identified that the availability of management training programs had significant relation with decision-making involvement (31).

A descriptive quantitative study in Malawi on unit Nurse managers, identified that inadequate resources (94.5%) and lack of training on management (10.8) harmfully affect Nurse involvement in decision making (13).

A survey conducted on Nurse leaders in three east Africa countries (Kenya 43.2%, Uganda 16.2%, and Tanzania 40.6%) indicated that lack of recognition of Nurses contribution, inadequate representation of nurse leader's in health policy development forums are barrier factors that hinder decision making involvement (18).

Unfairness in the health care system, very low consideration on burden-benefit distribution, very high professional migration, lack of attention to the voices, interest, and value of nurses are an indication of poor level of decision making participation among Nurse managers, and lack of the right person representative for nursing (35).

As a summary limited study had conducted in a different part of the world towards the Nursing profession, but their focus was on patient safety, medication errors, and quality service, so to advance the Nursing service in line with the modern world assessing the decision-making involvement and its associated factors among Nurse managers' and pay attention for these areas is the main concern and focuses of this study.

Nurse managers' participation in decision-making and associated factors have little been studied, in Ethiopia not studied. Only limited study findings on the factors that are associated with Nurse management. Thus, an important area for this study is to assess Nurse managers' involvement in decision-making and associated factors. Therefore, this study has been done to fill this gap.

2.4. Justification of the Study

The nursing profession is the heart of the health system in health organizations. But due to ignorance of this reality, there is professional and workplace violence, abuse, discrimination (36). Lack of grounded professional autonomy, lack of governmental support, considering the profession as the work of females, and negative image increase worldwide nurses' shortage due to migration of nurses to other professions (36). This is due to poor decision-making involvement, due to lack of professional representation in the managerial level (17, 22) that struggle against this.

Nurse managers, decision-making involvement, and associated factors are not well studied. Effective decision-making involvement in Nursing is mandatory because the profession is under great discrimination, abuse, considering as valueless and violent, nobody listens and gives attention to the voice and interest of Nurses (35), which is the main indicator of poor decision-making involvement at a different level. Therefore, this study aims to determine the level of decision-making involvement and associated factors among Nurse managers in Addis Ababa selected government hospital to reduce professional abuse and discrimination among Nurse and as an input for initiation of professional independency

2.5. Significance of the Study

One of the most common arguments for the study of Nurse managers' involvement in decision making and its associated factors is the potential benefit for the patient and advancement of Nursing practice as well as Professional independence. The result of this study provides basic and vital information about the level of decision-making involvement among Nurse managers and will create a common understanding of factors that affect Nurse managers' involvement in decision making. In addition, the findings of this study have an input for the development of the Nursing profession, because one characteristic feature of a profession is that professionals have the power over the practice of their discipline which is often considered as professional autonomy. The finding of this research also provides basic information for hospital administrators, policymakers, and further studies regarding nurse manager's decision-making involvement.

2.6. Conceptual Framework

This conceptual framework was developed after reviewing different works of literature (13, 16, 26, 29) on Nurse managers' decision-making involvement and associated factors. It shows the relationship between the dependent variable and independent variables. When there is a negative change on independent variables it will hinder Nurse managers' involvement in decision making.

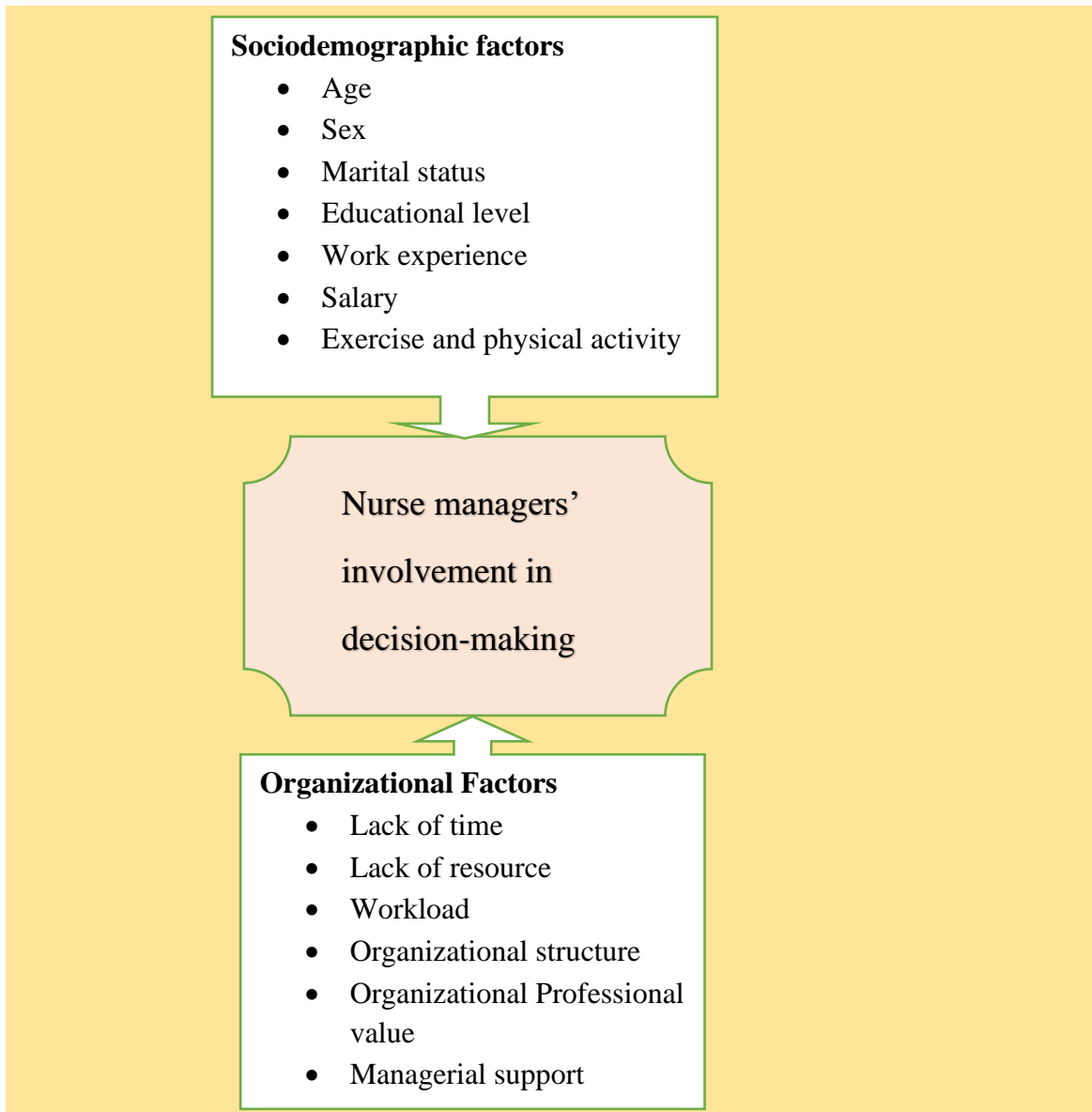


Figure 1: Conceptual framework on Nurse managers' involvement in decision-making and associated factors in selected government Hospitals in Addis Ababa, Ethiopia, 2021.

CHAPTER THREE

3. OBJECTIVE

3.1. General Objective

- To assess Nurse managers' involvement in decision-making and associated factors working in selected governmental hospitals in Addis Ababa, Ethiopia, 2021.

3.2. Specific Objectives

- To determine Nurse managers' involvement in decision-making in selected governmental hospitals in Addis Ababa, Ethiopia, 2021.
- To identify associated factors in Nurse managers' involvement in decision-making in selected governmental hospitals in Addis Ababa, Ethiopia, 2021.

CHAPTER FOUR

4. MATERIALS AND METHODS

4.1. Study Area

This study was conducted in Addis Ababa, which is the capital city of Ethiopia, the city is the center of the African Union and has many diplomats. The city has 11 sub-city administrations. The city climatic zones are lowland climates, annual weather condition runs from 10°C to 23°C (38). The city lay 2350 meters above sea level. According to the 2007 census conducted by the Central Statistical Agency of Ethiopia (CSAE), the total population was 3,384,569 but by 2020 it is estimated as more than 7.5 million (39). In the city there are more than 52 hospitals, 14 are government hospitals, from these 05 hospitals are selected, the total Nurse managers in these hospitals are 271. The data collection was conducted from February 15 to March 15, 2021.

4.2. Study Design

- Cross-sectional study design using a quantitative approach

4.3. Source Population

- All Nurse managers who are working in the government hospitals in Addis Ababa.

4.4. Study Population

- All Nurse managers who are working in selected government hospitals in Addis Ababa.

4.5. Eligibility Criteria

4.5.1. Inclusion Criteria

- All nurse managers with work experience above six months in the selected government hospitals in Addis Ababa.

4.5.2. Exclusion Criteria

Nurse managers who are on annual leave, not available during data collection, and who are not in a managerial position currently.

4.6. Sample Size

The actual sample size for the study was determined using the formula of single population proportion formula. i.e.

$$n = \frac{(Z_{\alpha/2})^2 * p(1-P)}{d^2}$$

where: **n** = estimated sample size

$Z_{\alpha/2}$ = Critical value at 95% confidence level of certainty (1.96)

p = prevalence, and **d** = marginal error

To determine the sample size the following assumption was used.

Since there were no previous studies in Ethiopia on Nurse managers' involvement in decision-making and associated factors, a prevalence level that estimates the maximum sample size (50%) was considered.

At 95% confidence interval the margin of error (d), be 0.05, $Z_{\alpha/2} = 1.96$ and $P = 50\%$.

50% was taken to estimate the maximum possible sample size.

$$n = \frac{(1.96)^2 * (0.05) * (0.05)}{(0.05)^2} = 384$$

Since the source is **271**, a finite population correction formula was applied to calculate the final sample size

$$\text{i.e. } n_f = \frac{ni}{1 + \frac{ni}{N}} = \frac{384}{1 + \frac{384}{271}} = \underline{160}$$

Where **ni**= the initial sample size from single population formula (384)

N= the source population (total number of Nurse managers)

By considering a 10% non-response rate the final sample size was **176**.

4.7. Sampling Procedure

Five hospitals were selected out of 14 government hospitals found in Addis Ababa using a lottery method. The sample size was calculated for each hospital based on proportionality to the number of Nurse managers. Then the final sample was selected from respected hospitals by systematic random sampling techniques (**figure. 2**)

$$\text{Then proportional sample size allocation} = \frac{nf*ni}{N}$$

Where N = total number of Nurse managers in the selected hospitals (271)

nf =final sample size of the study, which is **176**

ni =number of Nurse managers in each hospital

- Tikur Anbessa Specialized Hospital (TASH= 111) = $\frac{176*111}{271} = 72.09 \sim 72$
- St. Paulo's Hospital (90) = $\frac{176*90}{271} = 58.5 \sim 59$
- St. Peter's Hospital (25) = $\frac{176*25}{271} = 16.2 \sim 16$
- Zewditu memorial Hospital (20) = $\frac{176*20}{271} = 12.99 \sim 13$
- Eka Kotebe general Hospital (25) = $\frac{176*25}{271} = 16.2 \sim 16$

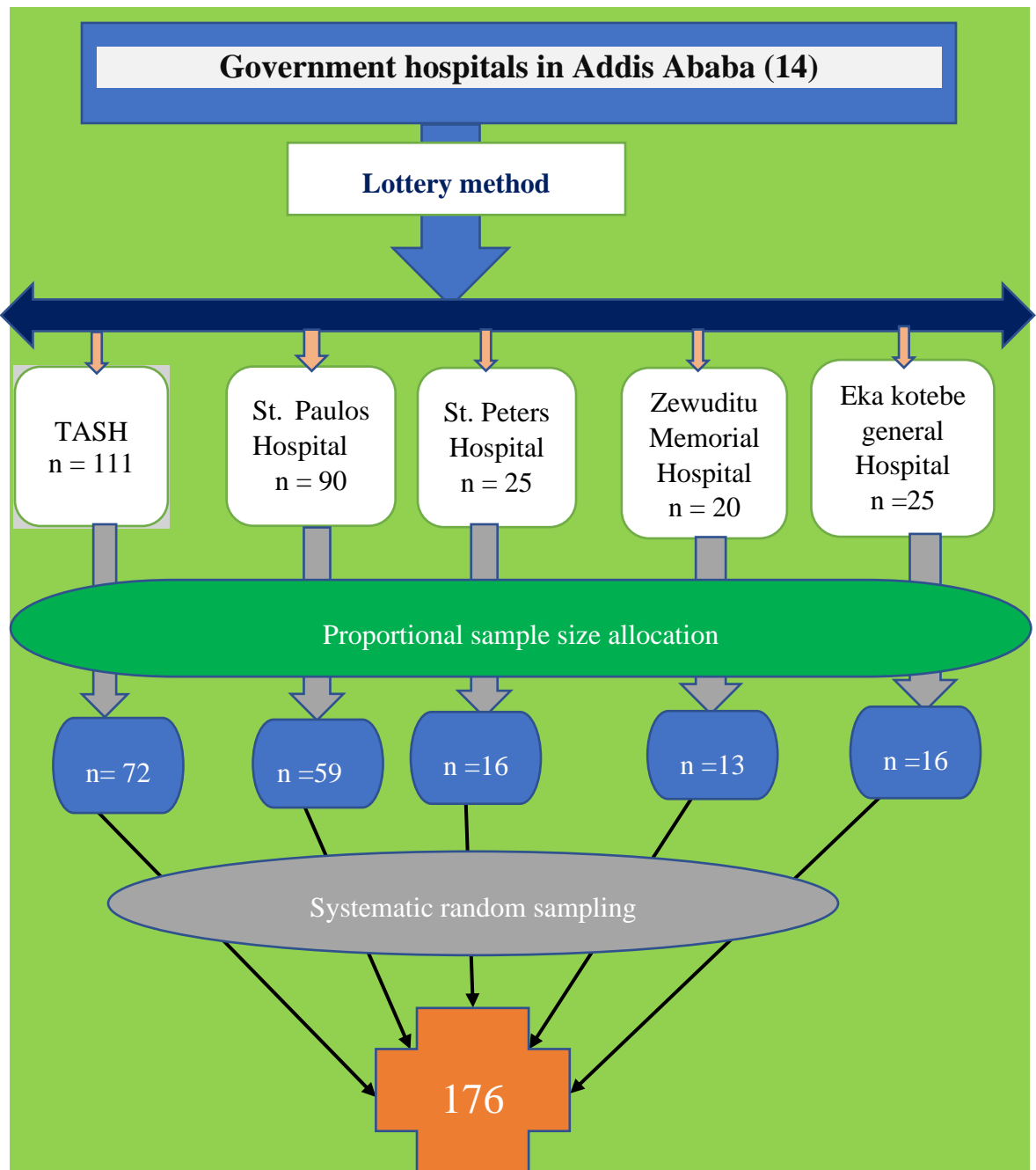


Figure 2: Schematic presentation of sampling procedure on Nurse managers' involvement in making-making and associated factors in selected government hospitals, Addis Ababa, Ethiopia, 2021.

4.8. Operational Definition

For this study, the term “Nurse managers” refers to Nurses in different levels of managerial positions in hospitals such as matrons, Supervisors, and Head Nurse. Nurse Managers include those Nurses, who contribute to the Nursing profession by directing and coordinating the work of the staff Nurses in clinical setup (12,13).

- **Nurse Managers:** Nurses in management-level positions in hospitals such as matron, head Nurse as well as supervisors.
- **Involvement in decision-making:** is defined as the involvement in a mental process resulting in the selection of a belief or a course of action among different possible alternative options, it could be either rational or irrational (1).
- **Good involvement in decision-making:** indicate the response rate of participants on involvement in decision-making above the mean value (28).
- **Poor involvement in decision-making:** indicate the response rate of participants on involvement in making-decision below the mean value (28).
- **Regular exercise and physical activities:** indicate those who are doing three and more times in a week or 30-minute fast walk or riding bicycle daily (41).

4.9. Data Collection Tools and Procedures

Well-structured and pre-tested self-administered questionnaires are prepared, designed, and developed in a way that meets the objectives of the study by reviewing different works of literature (13, 16, 26, 29). The questionnaire consists of all of the variables that meet the objective of the study. The questionnaire had three components (socio-demographic characteristics contain 11 items, involvement in decision-making contain 10 items, and associated factors related to Nurse managers' involvement in decision-making contain 15 items), used as a tool for the data collection process. Four-item decision-making involvement Likert scale was used. The internal reliability (Alpha Cronbach's) was 0.795. Those respondents who answered as very poor = 1, poor = 2, neutral = 3, good = 4 and very good = 5. Finally, those who score above the mean are classified as good decision-making involvement. Four BSc nurses as data collectors and two supervisors were selected from and assigned with previous experience outside from study hospitals to reduce biases, general orientation and training were provided to make them familiar with each question and the data collection process for 01-day, data collection process, and standard precautions were taken for coronavirus disease 2019 (COVID 19). The supervisors monitor the data collection process.

4.10. Study Variables

4.10.1. Dependent Variable

- Nurse managers' decision-making involvement

4.10.2. Independent Variables

➤ Sociodemographic Variables

- Age
- Sex
- Marital status
- Educational level
- Work experience
- Salary
- Exercise and physical activity

➤ **Organizational Variables**

- Lack of time
- Lack of resource
- Workload
- Organizational structure
- Managerial support
- professional value
- Training programs on management and leadership

4.11. Data quality Control

To assure the data quality, 10% of the questionnaire was pre-tested two weeks before the beginning of data collection at Yekatit 12 hospital. It helps to correct uncleared statements. The training was given to data collectors for one day. The questionnaires were checked and evaluated for clarity, completeness, and missed values. Those incomplete questionnaires were excluded from the entry and analysis. The tools used to assess decision-making involvement were checked for internal reliability (alpha Cronbach's 0.79). The collected data were reviewed and checked for completeness every day and before data entry. The supervisors monitor the data collection and check the collected data.

4.12. Data Processing and Analysis

The collected data were checked visually for their completeness. After checking for completeness data had been cleaned, coded, and entered to windows EP-info version 7.1 then exported to Statistical Package for Social Science (SPSS) version 25 for data analysis. Binary logistic regression model using bivariable and multivariable analysis method, and a $P < 0.25$ was the cut-off point to consider variables into multivariable from bivariable. A $P\text{-value-off} < 0.05$ was used to determine the predictor variables between variables with a CI of 95%. Descriptive statistics, charts, and statistical tables were used to present the frequencies and percentages.

4.13. Ethical Consideration

Ethical clearance and approval letters were obtained from Addis Ababa University, College of Health Science, School of Nursing, and Midwifery, Department of Nursing ethical review board, and from Addis Ababa Public Health Research and Emergency Management Directorate. After clearance letters, supportive letters had been written to Hospitals, where data collected to get support during data collection time from the school of Nursing and Midwifery. Secondly, Ethical clearance had been obtained from each hospital research and ethical review board. Consent form sheets were attached on the first page of each questionnaire. Based on informed consent only those who were interested to participate were included in the study. Confidentiality of the participants was assured in place, and personal identification like the name of the respondent was not explained in the questionnaires, once the questionnaires fulfill by participants it had returned to the data collector, the data used only for purpose of this research, paper of questionnaires were kept in a locked box and soft copy data were kept in the computer with a password.

4.14. Dissemination of the Result

The primary objective of this study is for partial fulfillment in the requirements to degree of master in adult health Nursing specialty, the result is submitted to Department of Nursing, School of Nursing and Midwifery, College of Health Sciences, Addis Ababa University, to Addis Ababa public health research and emergency management directorate. And also, the finding of the study had been disseminated to the Nursing director's office of the Hospital, and the Hospital administer the office. Further effort will be made to present it in workshops and conferences and to publish it in a reputable journal.

CHAPTER FIVE

5. RESULT

5.1. Socio-demographic characteristics

From the total study participants, a total of 176 Nurse managers participated in the study with a total response rate of 168 (95.5%). Of the total study participant's majority, 95 (56.5%) were females. The mean age of the respondents was 34.86 ± 8.08 . About 88 (52.4%) of them were married. More than half of study participants, 90 (53.6%) were BSc in their educational status.

Regarding the type of Nurse managers position, 115 (68.5%) of them were head nurses. Out of the study participants, 79 (47%) of them were with 6-10 years 'work experience as Nurse managers. Regarding monthly salary, from the total respondents, 52 (31%) of them get the monthly salary of 6193 to 8017 Ethiopian birr, 32 (19%) of them are work in OPD. Among the total respondents, 117 (69.6%) participate in physical activities and exercise, and from these 73 (62.4%) participate regularly (**Table 1**).

Table1: Socio-demographic characteristics of Nurse managers in selected government hospitals, Addis Ababa, Ethiopia, 2021 (n=168).

Variables		Frequencies	Percentage %
Gender	Female	95	56.5%
	Male	73	43.5%
Age	<=24	0	0.0%
	25-30	54	32.1%
	31-35	58	34.5%
	>35	56	33.3%
Marital status	Married	88	52.4%
	Unmarried	55	32.7%
	Divorced	14	8.3%
	widowed/er	11	6.5%
	Others	0	0.0%
Educational level	Diploma	1	0.6%
	BSC	90	53.6%
	MSC	77	45.8%
Work experience	<3	4	2.4%
	3-5	53	31.5%
	6-10	79	47.0%
	>10	32	19.0%
Monthly salary	<=6193	16	9.5%
	6194-8017	52	31.0%
	8018-9056	53	31.5%
	>9056	47	28.0%
Current working unit	ART	13	7.7%
	ER	19	11.3%
	ICU	15	8.9%
	medical ward	22	13.1%
	surgical ward	18	10.7%
	OPD	32	19.0%
	OR	13	7.7%
	Orthopedic ward	6	3.6%
	Office	18	10.7%
	Others	12	7.1%

Table1: Socio-demographic characteristics of the participants in selected government hospitals, Addis Ababa, Ethiopia, 2021 (n=168) cont....

Variables		Frequencies	Percentage%
A position that you currently work	Matron	25	14.9%
	Supervision	28	16.7%
	Head nurse	115	68.5%
Your participation in physical activity	Yes	117	69.6%
	No	51	30.4%
How many times per week	≥ 3	44	37.6%
	< 3	73	62.4%

5.2. Nurse managers' involvement in decision-making

Out of the total respondents, more than half of the study participants, 97 (57.7%) had poor decision-making involvement.

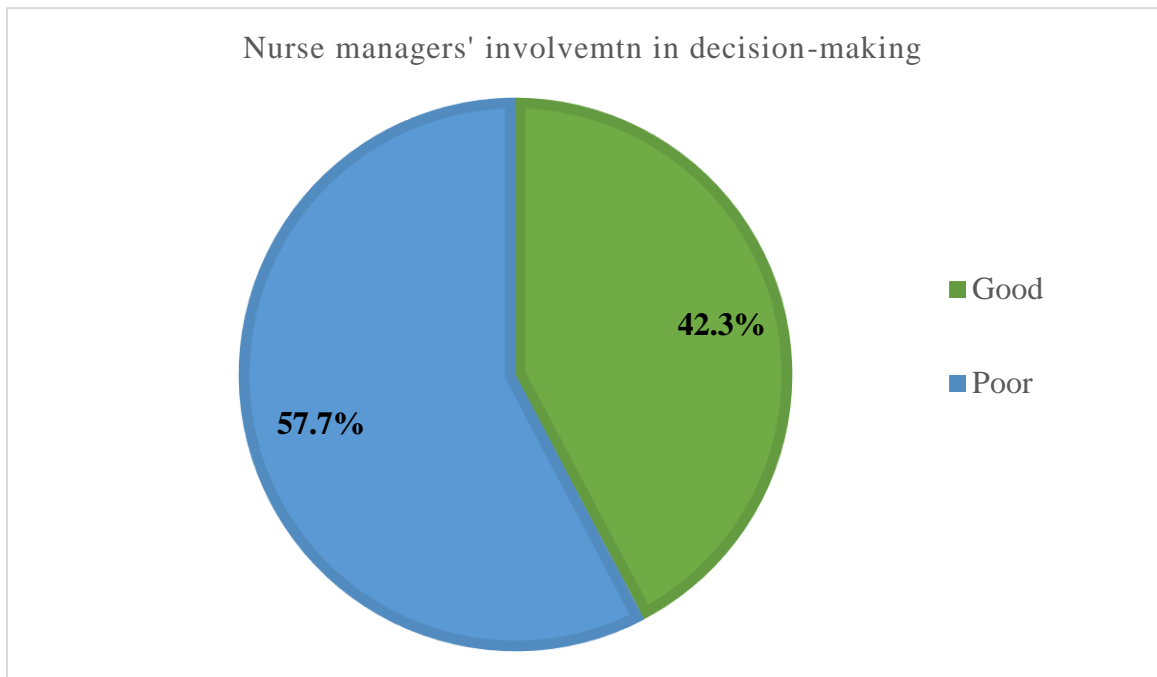


Figure 3: Nurse managers' involvement in decision-making of the participants in selected government hospitals, Addis Ababa, Ethiopia, 2021.

Among the study participants, less than half 71(42.3%) have previous experience in Nursing Management, 133 (79.2%) have experience in Nursing service and care. Out of the total respondents, only 31 (18.5%) have experience in financial and resource-related decision-making involvement, 39 (23.2%) have experience in administrative-related decision-making involvement.

Of the total respondents, 76 (45.2%) had good decision-making involvement in Nursing service-related activities. Out of the total respondents, 53 (31.5%) had good Decision-making involvement in financial and resource-related activities. Of the total study participants, 54 (32.1%) had good decision-making involvement in administrative related activities. Out of the total study respondents, 18 (10.7%) have good decision-making involvement in policy development. 41 (24.4%) of the participants responded that their organizational professional value towards Nursing Profession was neutral and only 36 (21.4%) organizational professional value towards Nursing Profession was good. The majority of respondents, 99 (58.9%) had access to information from top management, majority of the respondents, 101(60.1%) did not get feedback for their decision-making involvement. Out of the total respondents, 105 (62.5%) had got training in management.

Table 2: Nurse managers' involvement in decision-making and organizational professional values toward Nursing in selected government hospitals, Addis Ababa, Ethiopia, 2021 (n=168).

Variables		Frequency	Percent (%)
Previous experience in nursing management	Yes	71	42.3%
	No	97	57.7%
Previous experience in nursing service and care	Yes	133	79.2%
	No	35	20.8%
Previous experience in financial and resource related activities	Yes	31	18.5%
	No	137	81.5%
Previous experience in administrative related activities	Yes	39	23.2%
	No	129	76.8%
Decision-making involvement in Nursing service-related activities	very poor	6	3.6%
	Poor	8	4.8%
	neutral	23	13.7%
	Good	76	45.2%
	very good	55	32.7%
Decision-making involvement in financial and resource-related activities	very poor	13	7.7%
	Poor	26	15.5%
	neutral	58	34.5%
	Good	53	31.5%
	very good	18	10.7%
Decision-making involvement in administrative related activities	very poor	21	12.5%
	Poor	28	16.7%
	neutral	51	30.4%
	good	54	32.1%
	very good	14	8.3%
Decision-making involvement in policy development	very poor	64	38.1%
	poor	33	19.6%
	neutral	31	18.5%
	good	18	10.7%
	very good	22	13.1%
Organizational professional value towards Nursing Profession	very poor	35	20.8%
	poor	32	19.0%
	neutral	41	24.4%
	good	36	21.4%
	very good	24	14.3%

Table 2: Nurse managers' involvement in decision-making and organizational professional values toward Nursing in selected government hospitals, Addis Ababa, Ethiopia, 2021 (n=168) Conti...

Do you have access to information from top management	Yes	99	58.9%
	No	69	41.1%
Do you get feedback on your decision-making involvement	Yes	67	39.9%
	No	101	60.1%
Do you have attended training on decision making	Yes	105	62.5%
	No	63	37.5%

5.3 Factors associated with Nurse managers' involvement in decision-making

5.3.1. Bivariable analysis

Bivariate logistic regression analysis showed that the common socio-demographic characteristics such as (marital status, working unit, working position, work experience, monthly salary, and participation in exercise and physical activities), and organizational factors such as (lack of time, workload, poor organizational value towards the profession, lack of resources, lack of feedback for decision making involvement and lack of managerial support) were found to be significantly associated with Nurse managers decision-making involvement (**Table3**).

5.3.2. Multivariable analysis

The multivariate analysis factors like working position, lack of managerial support, and lack of feedback for decision-making involvement were associated with Nurse managers' decision-making involvement. Those Nurse managers who work in matron positions had 10 times good decision-making involvement than those Nurse managers who work as a head nurse: (AOR = 10.00, 95% CI: 1.14-87.72, P= 0.038). Those Nurse managers who had managerial support had 5 times good decision-making involvement than those Nurse managers who lack managerial support: (AOR=5.29, 95% CI: 1.208-23.158, P=0.027). Those Nurse managers who had got feedback for their decision-making involvement had 7.7 times good decision-making involvement than those Nurse managers who lack feedback: (AOR= 7.70, 95% CI: 2.482-23.911, P= 0.000). (**Table3**).

Table 3: Multivariate logistic regression analysis factors associated with Nurse managers' involvement in decision-making at selected government hospitals Addis Ababa, Ethiopia, 2021 (n=168).

Variable		Decision-making involvement				P-value
		Poor	Good	COR	AOR	
Marital status	Married	51(52.6%)	37(52.1%)	1.27(0.346-4.656)	0.52(0.079-3.590)	0.516
	Single	27(27.8%)	28(39.4%)	1.82(0.476-6.913)	1.26(0.177-8.991)	0.818
	Divorced	12(12.4%)	2(2.8%)	0.29(0.042-2.023)	0.15(0.012-1.791)	0.132
Current working unit	widowed/er	7(7.2%)	4(5.6%)	1	1	
	ART	5(5.2%)	8(11.3%)	1	1	
	ER	14(14.4%)	5(7.0%)	0.22(0.049-1.014)	0.44(0.023-8.459)	0.589
	ICU	12(12.4%)	3(4.2%)	0.16(0.029-0.845)	0.32(0.010-9.814)	0.514
	medical ward	8(8.2%)	14(19.7%)	1.10(0.266-4.504)	1.48(0.090-24.414)	0.784
	surgical ward	10(10.3%)	8(11.3%)	0.50(0.117-2.139)	0.66(0.050-14.788)	0.915
	OPD	18(18.6%)	14(19.7%)	0.49(0.130-1.816)	0.69(0.040-11.872)	0.799
	OR	12(12.4%)	1(1.4%)	0.05(0.005-0.533)	0.06(0.002-2.004)	0.114
	Orthopedic ward	5(5.2%)	1(1.4%)	0.13(0.011-1.406)	0.11(0.001-12.720)	0.357
	Office	8(8.2%)	10(14.1%)	0.78(0.183-3.342)	4.00(0.214-74.870)	0.353
The position that you currently work	Others	5(5.2%)	7(9.9%)	0.88(0.176-4.341)	2.50(0.111-56.269)	0.56
	Matron	2(2.1%)	27(38.0%)	28.57(6.374-128.111)	10.00(1.140-87.715)	0.038*
	Supervision head nurse	13(13.4%)	13(18.3%)	2.88(1.231-6.678)	0.60(0.0115-3.117)	0.543
Do you get feedback related to your decision-making involvement	No	76(78.4%)	25(35.2%)	1	1	
	Yes	21(21.6%)	46(64.8%)	6.66(3.353-13.224)	7.70(2.482-23.911)	0.000**
Do you have equal status with other managers	No	77(79.4%)	31(43.7%)	1	1	
	Yes	20(20.6%)	40(56.3%)	4.97(2.518-9.802)	1.74(0.0535-5.643)	0.358
Lack of time	No	76(78.4%)	27(38.0%)	1	1	
	Yes	21(21.6%)	44(62.0%)	5.90(2.986-11.647)	2.85(0.0610-13.287)	0.183
Workload	No	73(75.3%)	39(54.9%)	1	1	
	Yes	24(24.7%)	32(45.1%)	2.50(1.294-4.813)	0.92(0.209-4.018)	0.097
Poor organizational professional value	No	17(17.5%)	37(52.1%)	5.12(2.542-10.318)	0.72(0.195-2.688)	0.629
	Yes	80(82.5%)	34(47.9%)	1	1	

Table3: Multivariate logistic regression analysis factors associated with Nurse managers' involvement in decision-making at selected government hospitals Addis Ababa, Ethiopia, 2021 (n=168) cont.....

Variables		Poor	Good	COR	AOR	P-value
Lack of resource	No	64(66.0%)	36(50.7%)	0.53(0.283-0.993)	1.68(0.500-5.639)	0.402
	Yes	33(34.0%)	35(49.3%)	1	1	
Poor organization	No	12(12.4%)	28(39.4%)	4.61(2.137-9.955)	1.27(0.317-5.101)	0.734
	Yes	85(87.6%)	43(60.6%)	1	1	
Lack of managerial support	No	11(11.3%)	39(54.9%)	9.53(4.357-20.840)	5.29(1.208-23.158)	0.027*
	Yes	86(88.7%)	32(45.1%)	1	1	
Low salary	No	75(77.3%)	43(60.6%)	1	1	0.629
	Yes	22(22.7%)	28(39.4%)	0.02(1.133-4.349)	0.69(0.150-3.146)	
Your work experience	No	92(94.8%)	50(70.4%)	1	1	0.054
	Yes	5(5.2%)	21(29.6%)	7.73(2.747-21.740)	6.08(0.970-38.115)	
Lack of regular exercise and physical activities	No	90(92.8%)	57(80.3%)	1	1	0.812
	Yes	7(7.2%)	14(19.7%)	3.16(1.202-8.297)	1.27(0.180-8.917)	

Note: COR= crude odd ratio
AOR=Adjusted odd ratio
* Show P< 0.05
** Show P< 0.001

CHAPTER SIX

6. DISCUSSION

The study was trying to address issues related to the decision-making involvement of Nurse managers and associated factors working in selected government hospitals.

Effective Nursing management and leadership are essential for the provision of desired and quality patient care that will contribute to the improvement of any country's health indicators. The Nurse Manager is the vital individual who has a direct influence on nursing service and ensures the desired quality of nursing services achievement (6.7).

In the current study of the total respondents, 71 (42.3%) of them had good decision-making involvement which is lower than the study conducted in Egypt, 91% (14), in Australia, 74.3% (23), in Thailand, 67.5% (29). This may be due to differences in management support, the difference in enabling structure, the difference in organizational professional value, the difference in health policy and hospital setup.

From the total respondent majorities, 97 (57.7%) had poor decision-making involvement, which is in line with the study conducted in Finland 24), and Southeastern United States (25), this is poor involvement may be due to Nurse managers' most frequent emphasis were on patient care, lack of managerial support, and high levels of engagement in assorted activities.

The findings in this study also showed that those Nurse managers who work in a matron position had 10 times good decision-making involvement than those Nurse managers who work as a head nurse. This study result was in line with the study conducted in Egypt (31) and Sweden (34). This may be due to workload differences and head Nurses mostly emphasize patient care and are involved in assorted activities.

The other finding of this study was that Nurse managers who had got managerial support had 5 times good decision-making involvement than those Nurse managers who lacked managerial support. This result had supported by the previous study conducted in Thailand (29). This may be because the supported one had the chance for training, access to information from top managers, and empowerment.

This study also revealed that those Nurse managers who had got feedback for their decision-making involvement had 7.7 times good decision-making involvement than those Nurse managers who didn't get feedback, this finding had supported by the study conducted in North California (26) and East Africa (18). This may be because feedback is the means for taking correction of one gap and weakness and a means for self-enhancement.

In this study sociodemographic characteristics of the participants like work experience, educational level, and age had no association with Nurse managers decision-making involvement, but in the previous study in Egypt (14), Canada (21), Thailand, and South Korea (30), showed that socio-demographic character had a significant association with Nurse managers decision making involvement. This may be due to differences in socioeconomic status and health policy, assorted activities of Nurse managers, value difference towards the profession, and lack of empowerment for the higher position.

Another finding in this study was about participation in regular exercise and physical activities, from the total respondent majority 117 (69.6%) participated in physical activities and exercise, there was no association between this sociodemographic character and decision-making involvement. This finding is different from a previous study conducted in Iran (36). This difference may be due to socioeconomic and cultural differences.

In this study out of the total respondents, most of them 118 (70.2%) lacked managerial support and more than half 101 (60.1%) didn't get feedback for their involvement in decision-making. This study was supported by a study conducted in Sweden prospective design on health workers indicated that lack of managerial support from top managers is undesirably interrelated with low involvement of decision in health care managers (37).

Another finding in this study, lack of managerial support affects Nurse managers' decision-making involvement which is like the study conducted in Egypt and Sweden (14,37), this is because, when there is a lack of managerial support it will affect the availability of training and information access.

CHAPTER SEVEN

7. STRENGTH AND LIMITATION OF THE STUDY

7.1. Strength of the Study

Unlike other studies conducted in the previous, this study included Nurse managers like matron and supervisor beside. High response rate. Uses primary data. It is the first in Ethiopia.

7.2. Limitation of the Study

Lack of adequate similar studies to make more comparative discussion. Like any cross-sectional study, it is difficult to know whether determinant or outcome occurred first. Includes public hospitals only. Only quantitative, not supported by qualitative approach.

CHAPTER EIGHT

8. CONCLUSION AND RECOMMENDATIONS

8.1. Conclusion

This study showed that more than half of respondents, 97 (57.7%) had poor involvement in decision-making. In general, the significant variables were working position, from the socio-demographic factors, lack of managerial support, and lack of feedback from organizational factors were strongly associated with involvement in decision making.

8.2 Recommendations

- The involvement of Nurse managers in decision-making had a boundless effect to keep up an advanced and cost-effective health care system.
- MOH, AAHB, and administrators of the hospitals may be needed to improve-decision-making involvement of Nurse managers for a better quality of nursing as well as medical care by providing feedback for them for those who did not get feedback for their decision-making involvement and supporting those who lack managerial support.
- For hospitals: Each hospital's regulation needs to consider the involvement of Nurse managers in decision making in policy development and planning.
- For hospital management: The health care system needs to create a supportive management system and favorable working environment by considering the benefits of Nurse managers' decision-making involvement in the healthcare system.
- For ENA: ENA needs to emphasize Nurse managers' empowerment for professional independence.
- For the Department of Nursing: The Department of Nursing needs to create and keep up a good link between the academic and clinical setup to assure professional autonomy.
- For Nurse managers: may need to search their gaps and act accordingly and improve their involvement in decision making
- For researcher: study the impact of Nurse managers' poor involvement in decision making on the Nursing profession as well as quality of the healthcare service.

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APPENDIX

Appendix A. Information Sheet

A research questionnaire on Nurse managers' involvement in decision-making and associated factors working in selected government hospitals, Addis Ababa, Ethiopia, 2021.

Name of institution: Addis Ababa University, College of Health Sciences, School of Nursing and Midwifery, Department of Nursing.

Good morning/afternoon, my name is _____. I am working as a data collector in the research conducted by Charlie Tazebew, who is conducting this research for the partial fulfillment of his Master's degree in Adult Health nursing specialty track at Addis Ababa University. I am trying to assess Nurse managers' decision-making involvement and associated factors. I would like your honest opinion concerning the questions.

Title: Nurse managers' involvement in decision-making and associated factors in selected government hospitals in Addis Ababa, Ethiopia, 2021.

Purpose: This study aims to assess Nurse managers' involvement in decision-making and associated factors working in selected government hospitals in Addis Ababa, Ethiopia, 2021.

Duration: The question that is going to be asked will take about a maximum of 35 minutes.

The benefit of the study: There is no direct benefit to you now. However, the result of the study has been helpful to provide basic information about the level of decision-making involvement of Nurse managers and factors that affect their involvement.

Risk of the participant: Participating in this study will not have any risk or harm associated with data collection, only your time to fulfill the questions

Rights of the participant: Participating and not participating in the full right and participants can stop from participation in the study at any time. Participants can ask any questions which are not clear for understanding.

Confidentiality: Any information forwarded had to be kept private and personal identity not be specified and this data is used only for research purposes.

Address of principal instigator: Name: Charlie Tazebew, Cell phone: +251 -918987094.

E-mail: chacha2112hope@gmail.com.

Appendix B. Consent Form

I have read and understood the above information about the purpose, advantage, and disadvantage of this study titled as Nurse managers involvement in decision making and associated factors working in selected government hospitals. I have been informed that if I feel uncomfortable responding to any of the questions, I feel free to drop in any time I wish to do so. I understood that the participation is completely voluntary based. I have been told that my answers to the questions will not be given to anyone and not expect to write my name. Now I am giving my consent to participate in the study voluntarily.

Could I have your permission to continue? 1. Yes, 2. No, Stop

Witness: Signature _____ Date _____

Data collector: Name _____ Signature _____ Date _____

Result: 1. Questionnaire completed _____

2. Questionnaire partially completed _____

3. Participant refused _____

Checked by Supervisor: Name _____ Signature _____ Date _____

Thank you for your cooperation!!!

Appendix C. Questionnaires

Part I: Socio-demographic Characteristics:

S.No.	Descriptions	Choice
101.	Your Sex	1. Female 2. Male
102.	Your Age	_____In years
103.	Your marital status	1. Married 4. Widowed/er 2. Single 5. Others specify..... 3. Divorced
104.	Your educational level	1. Diploma 3. MSc. 2. BSc. 4. Others(specify).....
105.	Your work experience	_____In years/ months
106.	Your monthly salary	_____In ETB
107.	Name Hospital you working currently	1. TASH 2. Zewditu Memorial Hospital 3. St. Paulos Hospital 4. Eka Kotebe Hospital 5. St. Peter Hospital
108.	Your current working area/unit	1.ART 6. OPD 2. ER 7. OR 3. ICU 8. Orthopedic ward 4. Medical wards 9. Office 5. Surgical wards 10. Other Specify
109.	Your position that you currently working	1.Matron 2.Supervision 3.Head Nurse
110.	Have you participated in physical activity and exercise?	1.Yes 2.No
111.	If “yes” how many times in a week?	1. ≥ 3 times 2. < 3 times

Part II: Nurse managers' involvement in decision-making:

S.no	Questions	circle your answer				
201.	Do you have previous experience in nursing management before your current position?	1. no	2. yes			
202.	In which area do you involve in decision-making more? (More than one answer possible)	1. in nursing service-related decision				
		2.in financial & resource related decision				
		3.in administrative related decision				
		4. other (specify).....				
Very good=5, Good=4, Neutral=3, Poor=2, and very poor=1						
(Put as “√” for you answer)		5	4	3	2	1
203.	Your level of decision-making involvement in Nursing service-related decision at your hospital					
204.	Your level of decision-making involvement in a financial and related decision at your hospital					
205.	Your level of decision-making involvement in the administrative related decision at your hospital					
206.	Your level of decision-making involvement in policy development					
207	Organizational professional value towards Nursing Profession					
208.	Do you have access to information from top management regarding your hospital values and management goals?	1. yes		2. no		
209.	Do you get feedback related to your decision-making involvement?	1. no		2. yes		
210.	Have you have attended training on decision making?	1. yes		2. no		

Part III: Factors associated with Nurse Managers' involvement in decision-making:

301.	Do you have equal status with other hospital managers with comparable responsibilities?	1. yes 2. no	
302.	If “no” decision making in your hospital rests primarily in the hands of	1. hospital administrators 2. physicians 3. board of the hospital 4. other (specify).....	
303.	Do you consult when regulation is formulated in your hospital?	1. yes 2. no	
304.	What factors affect your involvement in decision-making?		
	304. 1	Lack of time	1. yes 2. no
	304.2	Workload	1. yes 2. no
	304.3	Poor organizational professional value	1. yes 2. no
	304.4	Lack of resource	1. yes 2. no
	304.5	Poor organizational structure	1. yes 2. no
	304.6	Lack of managerial support	1. yes 2. no
	304.7	Low salary	1. yes 2. no
	304.8	Your work experience	1. yes 2. no
	304.11	Lack of access to information	1. yes 2. no
	304.12	Lack of regular exercise and physical activity	1. yes 2. no
Thank you for your cooperation!!!			