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OVERSEAS FILIPINO NURSES' WORKLOADS IN CARE OF CLIENTS WITH GENETIC DISORDERS: A MIXED METHOD INQUIRY

*Rogilyn Dapicurtar

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Corresponding Author: Rogilyn Dapicurtar; doi:10.46360/globus.met.320252002

Abstract

Aim: Genetic disorders are more common abroad. Although it is part of the nursing education and preparation in this Philippines, this area remains unexplored. This study aimed to determine the association between demographic and professional factors and the physical and emotional workload of nurses working in genetic care settings.
Methodology: A sequential explanatory mixed-methods design was utilized. Quantitative data were collected through surveys assessing, followed by qualitative interviews that further explored nurses' lived experiences. Statistical analyses tested associations between factors, while thematic analysis was used to interpret qualitative narratives.
Results: Age, sex, educational attainment, and years in current assignment had no significant association with workload. In contrast, occupational rank, area of assignment, total years of service, and shifting schedules exhibited highly significant links—particularly with emotional workload. Shifting schedules were also associated with increased physical strain. Qualitative results yielded three themes: (1) Multifaceted Demands of Genetic Care encompassing physical, emotional, and ethical responsibilities; (2) Emotional Resilience and Adaptive Strategies centered on teamwork and coping mechanisms; and (3) Professional Commitment Despite Challenges, highlighting nurses' dedication to compassionate care. Integrated findings revealed that institutional factors heighten workload, yet resilience and professional values sustain quality care deliver.
Conclusion: Overseas Filipino nurses navigate substantial workload pressures through adaptability, teamwork, and a strong sense of purpose. Addressing institutional contributors, such as staffing patterns and shift schedules, may help reduce workload strain and support nurses in maintaining holistic, patient-centered care.

Keywords: Program ECHOS, Creative Nonfiction, Writing Skills, Mixed-Methods Research.

Introduction

The rapid integration of genomics into modern healthcare has expanded the responsibilities of nurses worldwide, requiring stronger competencies in genetic assessment, ethical decision-making, and interdisciplinary collaboration. As genetic disorders become more central to personalized care, nursing practice increasingly demands both technical expertise and emotional resilience (Calzone et al., 2010). For Filipino nurses working overseas, these expectations are intensified by cultural adjustments, institutional constraints, and the specialized nature of genetic care (Genotiva, 2023; Elmaco, 2022).

Globally, high nursing workload has been linked to burnout, reduced job performance, and compromised patient safety. In genetic care settings, these challenges are magnified due to the need for genetic literacy, communication with families about hereditary conditions, and psychosocial support for clients coping with lifelong diagnoses (Wang et al., 2023; Cao et al., 2025). Many nurses report insufficient preparation in genetics, leading to uncertainty, stress, and diminished confidence in clinical roles.

For overseas Filipino nurses, the burden of workload intersects with sociocultural barriers such as language differences, discrimination, and inadequate orientation programs (Alsadaan et al., 2021). These factors heighten the physical and emotional demands of caring for patients with genetic disorders, particularly in multicultural, high-acuity environments. Despite the growing attention given to genomic nursing, research remains limited on how genetic complexity contributes to workload - specifically emotional strain, physical demands, and ethical responsibilities.

Another layer of pressure arises from the emotional and communicative labor inherent in genetic care. Nurses frequently explain complex diagnoses, address family concerns about hereditary implications, and coordinate referrals to genetic counselors. These responsibilities require time, empathy, and cultural sensitivity, often adding invisible labor that is unrecognized yet central to patient support (Genotiva, 2023).

RN, Student, Graduate School, Wesleyan University of the Philippines, Philippines.

Given these global, national, and situational realities, a clear gap persists in understanding how genetic care uniquely shapes the workload of Filipino nurses abroad. Existing studies do not fully capture the combined quantitative burden and qualitative lived experiences associated with this specialized role.

Thus, this study examines the physical and emotional workload of overseas Filipino nurses caring for clients with genetic disorders, integrating both statistical associations and narrative experiences. By addressing this gap, the study seeks to illuminate the specific pressures of genetic care and contribute to improving support systems, training, and global nursing practice.

Review of Related Literature and Studies

This section synthesizes literature relevant to the workload of overseas Filipino nurses (OFNs) caring for patients with genetic disorders. The integration of genomics into healthcare has expanded nursing roles, requiring skills in genetic assessment, patient education, and ethical decision-making. However, Filipino nurses often lack access to training and institutional support, while targeted education improves competence and communication (Zhang et al., 2022; Kawasaki et al., 2021; Mikkelsen et al., 2022). Fragmented resources, unclear nursing roles, and ethical concerns such as data privacy and genetic discrimination further challenge nurses' preparedness (Wang et al., 2023; Alanazi et al., 2024; Simarro, 2022). Without structured genomic training, OFNs may struggle to manage complex genetic cases effectively.

Nursing workload, encompassing physical, emotional, and cognitive demands, intensifies in genetic care. Compassion fatigue and emotional strain are common, particularly among nurses supporting families of children with hereditary or rare disorders (Abu Shosha et al., 2022; Taşdemir et al., 2024). High workload contributes to reduced well-being, anxiety, depression, musculoskeletal issues, and lower job satisfaction (Babapour et al., 2022; Shah et al., 2021; Feliciano et al., 2022). For OFNs, additional stress arises from understaffing, heavier caseloads, cultural barriers, and discrimination, heightening the risk of burnout and emotional exhaustion (Alsadaan et al., 2021; Mariyanayagam et al., 2025; Genotiva, 2023).

Structured orientation and ongoing professional development are crucial for preparing nurses for specialized genetic roles and supporting emotional resilience (Lalithabai et al., 2021; Asuzu & Aimienwanwu, 2025). Yet, migrant nurses often experience insufficient onboarding, limited guidance, and uneven access to training (Genotiva, 2023; Hack-Polay et al., 2022). Properly implemented programs improve morale, competence, and reduce emotional distress (Hussein et al., 2024).

Caring for patients with genetic disorders requires technical expertise, ethical sensitivity, and emotional resilience, yet OFNs face gaps in training, institutional support, and culturally responsive guidance. Few studies examine the intersection of genetics, workload, and migrant nursing, highlighting the need for a mixed-methods study that captures both measurable workload patterns and lived experiences. Findings can inform orientation programs, emotional support systems, and genomics-focused training to better equip Filipino nurses in international healthcare settings.

Theoretical Framework

The study is anchored in pragmatism and integrates three complementary theories: the Job Demands–Resources (JD-R) Theory, Jean Watson's Theory of Human Caring, and Lazarus and Folkman's Transactional Model of Stress and Coping. Pragmatism guides the mixed-method design by emphasizing real-world problem-solving and the practical value of combining quantitative measures of workload with qualitative insights into nurses' lived experiences. Within this lens, the JD-R Theory explains how the demanding nature of caring for clients with genetic disorders - combined with cultural, emotional, and organizational challenges faced abroad - creates high job demands that may be buffered by job resources such as orientation programs, mentoring, and genetic education. When these resources are lacking or misaligned, overseas Filipino nurses face heightened risks of burnout, job dissatisfaction, and compromised patient care.

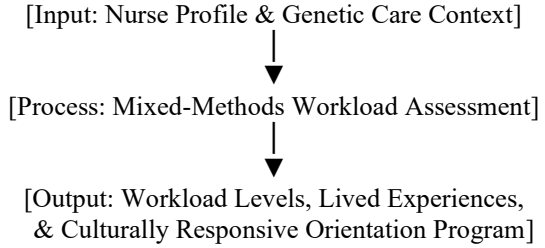
Complementing this organizational perspective, Jean Watson's Theory of Human Caring highlights the emotional, ethical, and relational dimensions of caring work, emphasizing the deep, transpersonal connections nurses form with patients and the emotional labor required in unfamiliar cultural and institutional settings. Meanwhile, the Transactional Model of Stress and Coping provide a psychological lens for understanding how nurses appraise and respond to stressors, particularly in foreign healthcare environments where emotional vulnerability, moral distress, and limited support are common. Together, these frameworks illuminate how workload is shaped not only by measurable job demands but also by subjective emotional strain, coping processes, and the presence - or absence - of supportive structures that enable compassionate, culturally sensitive care.

Conceptual Framework

The conceptual framework of this study illustrates how nurse- and environment-related factors shape

the workload of overseas Filipino nurses caring for patients with genetic disorders, ultimately guiding the development of a culturally informed orientation program. It is composed of three major components:

1. **Input:** Refers to the nurse profile (age, sex, education, rank, area of assignment, years of experience) and contextual factors surrounding genetic care, including patient-related complexity and environmental conditions such as cultural barriers, institutional support, and overseas healthcare demands.
2. **Process/Intervention:** Refers to the assessment of workload through both quantitative and qualitative methods. Quantitatively, emotional and physical workload are measured using modified NASA-TLX components; qualitatively, interviews and narratives explore lived experiences, emotional labor, challenges, and coping mechanisms. These two strands are integrated through a convergent parallel mixed-methods design.
3. **Output/Outcome:** Refers to the identified levels of physical and emotional workload, the themes describing nurses' experiences in genetic care, and the resulting recommendations for a culturally responsive, context-specific orientation program tailored to the needs of overseas Filipino nurses.



This framework demonstrates how the interaction of personal, clinical, and environmental factors influences workload and shapes nurses' experiences, providing a structured basis for designing meaningful and evidence-based support programs for Filipino nurses in genetic care settings abroad.

Statement of the Problem

Overseas Filipino nurses caring for clients with genetic disorders face varying levels of physical and emotional workload shaped by clinical complexity, cultural barriers, and institutional support in foreign healthcare systems. These conditions may influence their well-being, performance, and ability to provide competent and compassionate care. Despite the critical role they play, limited research examines how nurse characteristics, patient complexity, and environmental factors interact to affect workload. Understanding these relationships is essential in identifying areas of strain, describing lived experiences, and designing appropriate support mechanisms. Therefore, this study investigates the workload of overseas Filipino nurses caring for clients with genetic disorders, examines how their profile relates to their perceived workload, explores their experiences, and aims to develop a culturally sensitive orientation program tailored to their needs.

Research Objectives

This study aimed to assess the workload of overseas Filipino nurses caring for clients with genetic disorders. Specifically, it sought:

1. To describe the profile of the respondents in terms of age, sex, educational attainment, occupational rank, area of assignment, total years of nursing experience, years working abroad, and frequency of encountering clients with genetic disorders.
2. To determine the level of workload in terms of physical and emotional workload.
3. To examine whether a significant relationship exists between nurses' profiles and their perceived physical and emotional workload.
4. To determine significant differences in workload across demographic and professional characteristics.
5. To explore nurses' lived experiences in caring for clients with genetic disorders.
6. To identify the drivers and challenges that influence their workload in genetic care.
7. To develop an orientation program for nurses handling clients with genetic disorders based on quantitative and qualitative findings.

Research Questions

1. What is the profile of the respondents in terms of age, sex, highest educational attainment, occupational rank, area of assignment, years of nursing experience, years working abroad, and frequency of encountering clients with genetic disorders?
2. What is the level of physical and emotional workload experienced by the respondents?
3. Is there a significant relationship between the nurses' profile and their perceived physical and emotional workload?
4. Are there significant differences in workload based on demographic or professional characteristics?
5. What are the lived experiences of nurses caring for clients with genetic disorders?
6. What drivers and challenges influence their workload in genetic care?

7. What orientation program can be developed for nurses caring for clients with genetic disorders?

Methodology

Research Design

This study employed a convergent parallel mixed-methods research design to comprehensively examine the nursing workload of Overseas Filipino Nurses (OFNs) caring for clients with genetic disorders. Quantitative and qualitative data were collected simultaneously, analyzed independently, and merged during interpretation to capture both measurable workload levels and the subjective realities embedded in emotional, cultural, and ethical caregiving demands. This design was appropriate because the phenomenon of workload is multidimensional and cannot be sufficiently understood through numerical indicators alone; qualitative narratives were necessary to illuminate the lived experiences, coping mechanisms, and contextual challenges faced by OFNs.

Population and Sampling

The study was conducted at the University Hospital of Sharjah (UHS) in the United Arab Emirates, a tertiary institution with advanced genetic testing, counseling, and multidisciplinary services. UHS was purposefully selected due to its large population of Filipino nurses and regular management of genetic cases across units such as Pediatrics, Neonatology, Internal Medicine, and Neurology.

A purposive sampling technique was used to recruit participants with direct experience in caring for genetically affected clients. For the quantitative phase, at least 100 OFNs meeting the inclusion criteria (licensed Filipino nurse, minimum six months of service, at least one encounter with a genetic-disorder patient) were targeted to ensure statistical reliability. For the qualitative phase, 6–10 participants were selected from survey respondents who volunteered for interviews, with final sample size determined by data saturation, ensuring sufficient depth and richness of responses.

Instruments

A mixed-method instrument grounded in the Job Demands–Resources Theory, Watson's Theory of Human Caring, and Lazarus and Folkman's Stress-Coping Model was utilized. The quantitative tool consisted of a modified NASA-TLX, measuring two components:

1. Physical Workload (physical strain, fatigue, effort), and
2. Emotional Workload (mental demand, frustration, temporal pressure, effort).

Items were rated on a 4-point Likert scale (1 = Never to 4 = Always). A demographic profile section captured age, sex, education, rank, area of assignment, years of experience, years abroad, and frequency of encountering genetic cases. Expert validation and a pilot test yielded a Cronbach's alpha of 0.88, establishing reliability.

The qualitative tool consisted of semi-structured interview questions exploring memorable care experiences, emotional challenges, cultural influences, coping strategies, and support needs. Questions aligned with coping theory and caring theory to ensure conceptual consistency.

Data Collection

Quantitative data collection spanned 30 days following ethical approval and institutional clearance. Questionnaires were distributed personally or through Google Forms, with informed consent secured prior to participation. All responses were anonymized and handled confidentially.

Qualitative data were gathered through online semi-structured interviews (Zoom/Google Meet) with consenting participants who completed the survey. Interviews were audio-recorded, transcribed verbatim, and conducted until saturation was reached, ensuring no new themes emerged. Thematic analysis was applied to capture nuanced insights that contextualized quantitative findings and informed the development of a culturally relevant orientation program.

Treatment of Data

Quantitative data were processed using SPSS 26. Descriptive statistics summarized respondent profiles and workload scores. Weighted means classified workload levels as low (1.00–2.00), moderate (2.01–3.00), or high (3.01–4.00). Relationships between profile variables and workload levels were examined using Pearson correlation (continuous variables) and Spearman's rho (ordinal variables). Group differences were analyzed using t-tests and one-way ANOVA, with Tukey's HSD for post-hoc comparisons.

Qualitative data were analyzed in NVivo 12 Plus using Braun and Clarke's six-step thematic analysis. Themes were compared with quantitative results during the integration phase to identify convergences, divergences, and complementarity. This triangulation strengthened interpretation and guided the design of the proposed orientation program.

Ethical Considerations

The study adhered to strict ethical standards:

- Approval and Consent: Ethical clearance was obtained from the University of Cebu

Research Ethics Committee. Participation was entirely voluntary.

- Informed Consent: Participants were briefed on the purpose, procedures, and potential risks and benefits of the study. Written consent was secured for both surveys and interviews.
- Confidentiality: Personal identifiers were omitted, and data were securely stored in password-protected files accessible only to the researcher.
- Participant Welfare: Participants were informed about potential emotional discomfort when discussing sensitive experiences and had the right to skip questions or withdraw at any time.
- Indirect Benefits: While no monetary compensation was provided, participants may benefit from improved institutional support informed by the study findings.

These measures ensured participants' rights were protected and the research-maintained credibility, transparency, and ethical integrity.

Results and Discussion

This section of the study presents the findings on the experiences of Overseas Filipino Nurses (OFNs) caring for patients with genetic disorders. The study explored nurses' motivation, challenges, work environment influences, and emotional and physical demands, integrating both quantitative and qualitative data collected through surveys and interviews. The findings also informed the design of a reorientation program to strengthen nurses' competencies, resilience, and professional well-being.

Motivation of Nurses Caring for Patients with Genetic Disorders

The nurses' motivation was primarily driven by a strong desire to improve patients' quality of life, empathy toward patients and families, and the pursuit of professional knowledge. Nurses shared that seeing patients' resilience and feeling connected to families reinforced their purpose and fulfillment. For instance, one participant noted that providing accurate care and support "empowers patients and their families to live with hope, dignity, and resilience." Nurses also highlighted that continuous learning and exposure to complex cases enhanced their competence and confidence in delivering care, aligning with Self-Determination Theory, which emphasizes autonomy, competence, and relatedness as drivers of intrinsic motivation.

Challenges in Caring for Patients with Genetic Disorders

Despite their motivation, nurses faced emotional, physical, and systemic challenges. Complex diagnoses and limited treatment options increased stress, while the emotional burden of witnessing patients and families struggle contributed to psychosocial strain. One nurse described it as "heartbreaking to see young patients face lifelong health challenges or to witness the anxiety and exhaustion of their families." Resource limitations, understaffing, and long or irregular shifts further compounded both physical and emotional workload. These challenges were often mitigated by experience, teamwork, and professional development.

Influence of Work Environment

The work environment was found to significantly affect patient care. Nurses reported that access to specialists, interdisciplinary collaboration, continuing education, and institutional support improved patient outcomes and reduced stress. Conversely, environments with insufficient staffing or lack of resources heightened workload and emotional fatigue. Participants valued lifelong learning opportunities and mentorship, which strengthened competence, confidence, and resilience in caring for patients with genetic disorders.

Impact of Physical and Emotional Demands

Physical and emotional demands were moderate to high. Nurses frequently engaged in repetitive and physically taxing tasks such as repositioning patients, while also managing the emotional toll of long-term care relationships. Experiences of compassion fatigue and burnout were mitigated through self-care, peer support, and reflective practice. Participants noted that attention to personal well-being improved their ability to deliver holistic and empathetic care.

Reorientation Program for Overseas Filipino Nurses

Based on these findings, a structured one-week reorientation program was proposed to enhance motivation, professional competence, emotional resilience, interdisciplinary collaboration, and workload management. Key components include:

- Motivation and Empathy Reinforcement: Workshops and reflective activities to renew compassion and sense of purpose.
- Genetic Care Competency Refresher: Updated lectures, skill demonstrations, and simulation exercises to strengthen clinical knowledge.
- Psychosocial and Emotional Resilience Training: Mindfulness sessions, counseling access, and debriefing to prevent burnout and compassion fatigue.
- Interdisciplinary Collaboration: Orientation and team-based exercises to

improve communication and patient-centered care.
- Workload and Resource Management: Training on time management, delegation, and institutional support mechanisms.
- Continuing Professional Development: Encouragement of lifelong learning, webinars, and research engagement.
- Peer Mentorship and Support Networks: Mentorship programs and experience-sharing sessions to strengthen professional identity.
- Institutional and Policy Integration: Alignment with bilateral policies to safeguard nurses' welfare and workplace support.

Integration of Findings

Quantitative and qualitative results converge to indicate that nurses face moderate-to-high physical and emotional workloads but can manage these challenges through professional development, empathy, and supportive work environments. Emotional resilience, intrinsic motivation, and organizational support are critical in sustaining nurse well-being and high-quality patient care. The reorientation program addresses these needs by equipping nurses with both technical skills and psychosocial strategies, ultimately fostering a compassionate, competent, and resilient nursing workforce.

Conclusion

This study found that the workload of Overseas Filipino Nurses (OFNs) caring for clients with genetic disorders is shaped more by organizational and operational factors - such as occupational rank, unit assignment, years of service, and shifting schedules - than by demographic traits. Shifting schedules, in particular, increased both physical fatigue and emotional strain due to inconsistent rest and demanding care routines. Qualitative insights further highlighted the dual burden of physical and emotional demands, with nurses relying on resilience, teamwork, and professional dedication as key coping mechanisms. These combined findings emphasize that workload in genetic care is multidimensional, driven by institutional conditions and patient complexity. They also guide the creation of a culturally responsive orientation and support program that focuses on time management, stress reduction, emotional resilience, and collaborative coping to enhance nurse well-being and maintain high-quality genetic care.

Recommendations

Based on the findings and conclusions of this study, the following recommendations are proposed:

First, it is recommended that hospitals employing overseas Filipino nurses enhance shift scheduling and staffing policies. Implementing fair, flexible, and balanced schedules can reduce physical strain and emotional exhaustion, helping to prevent fatigue and burnout while promoting overall workforce well-being.

Moreover, organizations should strengthen emotional and psychological support systems. Structured programs - such as wellness activities, peer debriefing sessions, counseling, and regular stress-management workshops - can maintain nurses' emotional well-being, increase job satisfaction, and foster resilience in high-pressure clinical environments.

In addition, role clarification and professional development should be prioritized. Clear job descriptions and defined career pathways ensure equitable workload distribution, while training programs and leadership workshops enhance competence, reduce stress from role ambiguity, and support career growth among nurses.

Furthermore, cultivating a supportive work environment is essential. Encouraging teamwork, collaboration, and open communication allows nurses to share emotional burdens, build camaraderie, and strengthen their capacity to manage demanding workloads effectively.

It is also advisable to integrate workload management and coping strategies into nursing education. Curricula and continuing professional development should include training on self-care, adaptive coping strategies, and time management, equipping nurses to navigate emotionally and physically challenging clinical settings.

Additionally, mental health and resilience must be emphasized in policy-making. Healthcare systems should recognize emotional workload as a critical factor affecting performance and retention, promoting work-life balance, adequate rest, and accessible psychological support for nursing staff.

Lastly, further research on workload and resilience is encouraged. Future studies should explore interventions that reduce workload and enhance resilience, particularly in highly technical and emotionally demanding nursing areas. Longitudinal or comparative research may provide deeper insights into how workload perceptions and coping strategies evolve across different cultures and healthcare contexts.

Conflicts of Interest

The author certifies that no significant competing personal, professional, or financial interests could

have affected the execution or presentation of the work contained in this manuscript.

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