ORIGINAL RESEARCH

Nurses working the night shift: Impact on home, family and social life

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ABSTRACT

Objective: To gain an understanding of the experience of registered nurses working the night shift, the impact on life outside of work, and ways of coping with home, family, and social stressors. A review of literature indicted that physiological and social difficulties from night shift work include problems with sleep, diet, menstrual cycles, stress/anxiety, weight gain, workplace errors and driving accidents. Also reported was less time for leisure, domestic responsibilities, child care, friends and family. Studies have been conducted internationally wherein workplace and cultural differences may affect global applicability. Interventions and anticipatory guidance are lacking. Further research was needed to better understand the effects on personal life and ways of coping.

Methods: A qualitative, phenomenological method was utilized. Registered nurses (N = 21) were interviewed.

Results: Identified themes included issues that affected family life, child care, and relationships with spouse/significant other, friends and extended family. Recommendations for self-care, coping, and suggestions for novice night shift nurses were offered. **Conclusions:** Twenty-one informants described the consequences of working the night shift and listed strategies used to contend with the stress it generates in their homes, families, and social lives. Nurses entering night shift employment would benefit from a program of anticipatory guidance. Knowledge concerning this topic raises awareness for improvements in nursing school curricula, institutional policy and staff satisfaction. Nursing remediation may involve scheduling flexibility, planned rest periods in comfortable staff lounges, healthy workplace nutritional offerings, exercise options, childcare services, peer support groups and in-service programs.

Key Words: Night shift, Registered nurse, Phenomenology, Coping, Sleep, Self-care

1. INTRODUCTION

Nurses working the night shift have been found to experience physiological difficulties and sleep related issues.^[1] Associated problems that arise outside of work include drowsy driving,^[2] family/child care difficulties,^[3] and less leisure time.^[4] Evidence-based anticipatory guidance or interventions for new nurses entering night shift duty are needed. The objectives of this research were to gain an understanding of the experience of registered nurses working the night shift and to outline the impact of the experience on their lives outside of work. Their strategies for coping with home, family, social stressors and recommendations were sought. The participants reported their experiences in personal interviews and shared insights as to their unique ways of coping with home, family, and social issues.

Background literature review

A review of nursing literature from 1995-2014 was conducted. Search terms included night duty, shift work, sleep, home, family, children, social and friends. Negative health

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effects of night duty have been researched internationally, resulting in a number of studies on issues of home, family or social implications. As working and cultural influences differ, findings may vary as to their generalized applicability. How night shift working nurses meet their family and personal needs as well as their social expectations needs to be fully studied.

Psychological changes during menses was identified in a study of 32 nurses in England and Wales working the night shift.^[5] Other studies have found increased bacterial/viral infections, sick calls, and greater health problems.^[1] Gastric symptoms, headaches, high blood pressure, sinusitis, depression, and fatigue^[6] were noted in a descriptive survey of 39 day versus 60 night shift nurses in Kentucky, USA. Weight gain was found to be the highest among night shift nurses in a study conducted in Brazil.^[7] A restricted number of food choices, stress and exhaustion contributed to intake of processed foods with low nutritional value during non-day shifts in a study of 378 nurses in a Hong Kong hospital.^[8] Reliance on vending machines was reported in a sample of 126 nurses in England.^[9] In Spain, a self-reported survey of 476 nurses found a higher incidence of varicose veins, appetite disturbance, sleep disorders, altered well-being, less social support and less leisure time with night versus day shift nurses.^[4] A positive result of working nights was identified in a descriptive study of 27 nurses in Sweden who reported eating healthier foods and finding more time to exercise during the day. Their healthy actions were attributed to the positive influence of their co-workers.^[10]

Fatigue, poor sleep quality and dangerous drives home were found in nurses who could not adapt to shift work.^[2] A descriptive study of 12 nurses in the USA who fell asleep while driving home indicated that although they were scared, they could not address this problem.^[11] In Greece a study of 163 nurses assigned to non-day shift work found increased unsafe driving incidents and accidents.^[12] In another study in the USA, 895 nurses were asked to keep a log book of shifts, hours worked, and drowsy driving incidents. Working the night shift was associtated with having a shorter duration of sleep, difficulty remaining awake at work and increased drowsiness while driving.^[13]

Naps on the night shift are not widely permitted or objectively studied. A descriptive study of 13 Canadian nurses found naps were viewed as beneficial for nursing health and patient safety.^[14] A follow-up study of 47 Canadian nurse managers was inconclusive as to whether a nap should be allowed. One disadvantage was felt to be a reliance on the nap to obtain a minimum amount of sleep.^[15] In the USA, a randomized controlled trial of naps with 49 physi-

cians and nurses working 3 consecutive 12 hour night shifts was conducted. Subjective reports testified as to improved performance after a 40 minute nap at 3 AM. However, the nap group did not perform better than the no-nap group in simulated morning drives home.^[16] In another study in the Phillipines, a questionnaire was administered to 655 nurses of various shifts. Working non-day shifts was associated with work-related injuries and increased illness.^[17]

A qualitative study of 18 nurses working nights in 4 Iranian hospitals identified concerns with fulfillment of priorities as wives and mothers.^[18] A study of 243 female nurses in Turkey found work demands, rotating shifts, and overtime caused family conflicts and lowered life/job satisfaction.^[19] A survey was conducted with 60 female nurses in India where the common practice is shift rotation every 7 days. The nurses reported difficulties in meeting family responsibilities and attending social functions, getting sufficient sleep, and a lack of family cooperation.^[20] In 1997, a survey of 745 Korean hospital nurses found that those working evening and night shift rotations had poorer physical/mental health and insufficient family/leisure time.^[21] A study was conducted with 396 female night shift hospital nurses in Brazil where workplace naps are permitted. Domestic chores such as child care, cooking, or cleaning one's home was found to reduce any potential benefits of a 2-3 hour workplace nap. A nap shorter than 2 hours was not as restorative, regardless of domestic chores.^[22] A 2009 qualitative study of night shift nurses in Brazil^[23] identified problems in social, personal and family matters. At the same time, the nurses found it beneficial to have increased time for activities outside of work.

Parental role conflict, child care needs, and job strain were studied in 378 Japanese nurses who were mothers of preschool children. The data were drawn from a larger survey of members of the Japanese Nurses Association. Rotating shifts contributed to increased parental role conflict. Working night shifts did not have a significant effect on child care if workplace support was present. Flexible work hours, workplace childcare and time off for sick children were recommended.^[3] A large study of 25,924 nurses from 10 European countries found that nurses tended to work nights in order to reduce work/home conflicts. This often resulted in loss of health, decreased patient safety and increased burnout. Recommendations included workplace childcare, night shift naps, reducing short notice of shift changes and increasing collegial support and team-building.^[24]

A study of 59 hospital nurses (55 women/4 men) and their partners was conducted in 2004 in Australia.^[25] The participants' assigned work shifts included rotating (54), per-

manent nights (4), and permanent days (1). Evening shifts were reported as the most difficult for parenting. Night shifts affected the nurses' health and stress, but had a lesser impact on social/family issues.

In summary, the reviewed literature highlights problems associated with working nights. Difficulties included managing a family, sleep issues, illness, stress and drowsy driving. Newly licensed nurses are often offered a night position. They must integrate new challenges with resulting changes in their personal lives. Experienced nurses may also transfer from day to night shifts for personal reasons. Research provides minimal guidance and interventions related to social, home, or family life. Gaps in the literature provided the impetus for conducting this research. The objectives of this study were to gain an understanding of the experience of registered nurses working the night shift, the impact on life outside of work, and ways of coping with home, family, and social stressors.

2. METHOD

Van Manen's qualitative tradition was the most suitable approach for this study.^[26] A phenomenological design encouraged participants to share personal experiences. In-depth interviews explored lived experiences of working nights while managing home, family and social issues. A college institu-

tional review board approval was granted prior to beginning the study. Participants gave informed consent. Confidentiality was assured using pseudonyms. Data was securely stored. Identifying information including names and employment were not used.

2.1 Sample and data collection

A snowball sampling technique was used. Enrollment criteria included a minimum of six months full-time work on the night shift. A night shift was defined as 12 or 8 hours. The participants worked at several hospitals and one skillednursing facility. Twenty-one participants demonstrated data saturation. Open-ended questions helped participants discuss the topic. Questions were used as a guide along with additional probes as needed (see Table 1). Recommendations were solicited for nurses new to the night shift along with suggestions for family members and administration. Participants lived and worked on Long Island and in New York City, New York, USA. Data was collected by recorded individual interviews at a place of their convenience, such as an office or private location. Recordings were transcribed verbatim during 2013. The first author, an experienced qualitative researcher, conducted all interviews to provide continuity in data collection. Co-authors were present in a number of interviews.

Table 1. Study questions

1	How does working the night shift have an offent on your life outside of work?
1	How does working the night shift have an effect on your life outside of work?
We are interested in learning about how working the night shift may have an impact on your home, family, a	
2	life. What has been your experience?
3	How do you take care of yourself (contend with the effects of working nights)?
4	How do you take care of family, home, or social issues affected by working nights?
~	Think back to the time when you first began working on the night shift. What were your thoughts then and now about your
5	personal and home life?
6	What outside of work concerns do you have now?
7	If you are experiencing any difficulties, what can be done to make things better?
0	What advice would you give to a nurse that is about to begin a job on the night shift as to how to best take care of
8	personal/social/family issues?
9	What recommendations could you provide for that new nurse's family, friends, or significant others?
10	If you were an administrator at an institution employing nurses on the night shift, what types of services would you offer to
10	make a night nurse's life outside of work better?

2.2 Method of data analysis

Interviews were sequentially reviewed, analyzed and compared in search of themes. Data collection and analysis occurred simultaneously. Audio tapes were transcribed by the first author. Transcripts were read while listening to the audio tapes for accuracy and to identify nuances. The transcripts were read line-by-line in a holistic approach. Highlighted statements and phrases were isolated and coded.^[26] Categories and themes were identified. Investigator field notes and memos were included in the analysis. Study participants were contacted as needed for verification. Prolonged engagement occurred with continued subject accrual. Member checking with a small group of participants provided confirmation. The study findings were also compared to extant literature. To achieve quality, preconceived investigator perspectives were identified prior to commencing the study. All the investigators had worked night shifts at some point and bracketed their experiences. An ongoing reflexive journal, memos and an audit trail ensured trustworthiness of data.^[27]

3. RESULTS

3.1 Demographic data

Descriptive demographic data was collected (see Table 2). There were 2 males and 19 females. Self-declared ethnicity included one of Asian descent, three Hispanic, four African

American, and thirteen Caucasian. Marital status included 11 living with a spouse/significant other, and 6 alone or with parents. There were 3 divorced, 1 widow, and 2 were engaged. About half (10/21) had young children at home.

3.2 Themes

Themes were extrapolated from the data on issues arising outside work (see Table 3). The themes are described in detail below with participant quotes added to give a vivid picture.

Table 2. Summary of demograph	phic da	ata
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Participants $N = 21$ Ages = 24-58Gender M = 2, F = 19	Marital Status Married or Sig Other = 11 Single = 6 Divorced = 3 Widow = 1	Those with children @ home Infant-preschool = 5 School age = 4 Grandchildren = 1 No children = 11
Ethnicity Asian = 1 Hispanic = 3 African American = 4 Caucasian = 13	Educational Degree Level Associate = 2 Bachelor = 17 Masters = 2	Years of Work As an RN = 8 mo-36 yrs On night Shift = 8 mo-20 yrs
Employment Location Hospital = 20 Skilled Nursing Facility = 1	Full or Part-time Full time = 19 Part time = 1 Full & Part = 1	Scheduled Night Hours/Shift 12 hour shifts = 15 8 hour shifts = 3 Mixed hours 8, 10, 12 = 3

Table 3. Themes

Sleep Obsessions: Always thinking about sleep	
Restorative Sleep Problems: Difficulties initiating or maintaining sufficient sleep	
Lost Day Off to Recovery: The day after working nights isn't really a day off	
The Tradeoff: Sacrificing sleep for family, children or other responsibilities	
Safety Risks: Driving home safely, caring for children while sleepy	
The Job Follows Me Home: Worry over nursing care provided or difficult cases	
Strained Normal: Trying to preserve relationships and marriage	
Social Isolation: Feeling unable to socialize	
Family and Friends: Just don't understand if they never worked nights	
Health Concerns: Poor nutrition, lack of exercise, stress	
Unable to Meet My Ideals: Juggling basic everyday needs, unable to care for children/parents/family as desired	

3.2.1 Sleep obsessions

Obsession with sleep and inadequate recovery after sleeping was a universal response. This preoccupation persisted even when there were no children to care for, or if they had someone to watch children while they slept. Sleep was inadequate due to circadian rhythm disruptions and domestic responsibilities. Typical comments were "I'm obsessed with sleep" and "I'm always thinking about sleep, even after I wake up. I'm planning how to get any sleep at all" and "I feel as if I'm

sacrificing a lot by doing this, it's restricting." Another said "It's insufficient, broken... or I'm oversleeping.... at work I sneak a forbidden nap for a few minutes" and "I can't get sleep out of my thoughts...it's always a background worry." Another said she would go out to her car at night and "steal" a brief nap at work.

All viewed nocturnal sleep as optimal and desired. One said "I always have to reset my inner clock and want to sleep at night like a normal person when I am off. That's not always so easy to do. Your body gets all mixed up." A lingering sense of exhaustion even after adequate sleep was common and typically expressed as "I feel like I'm dragging myself around no matter how much I sleep". Some reported that it was only possible to get a few hours of sleep when working 2-3 nights in a row. "I discovered I can function on 2 hours of sleep between shifts." Sleep during daylight hours was not rated as "normal" or truly "restful." One woman said "I had to convince myself I was "OK" and could function like anyone else after I slept in the daylight." They coped in a variety of ways, including using "blackout shades," eating a light "dinner" in the morning after work, buying "expensive silky sheets," wearing "comfortable pajamas," taking a "soothing bath" and spraying "lavender or other restful scents" on sheets.

3.2.2 Restorative sleep problems - Difficulties initiating/maintaining sufficient sleep

All expressed difficulties in initiating or maintaining sleep in some manner. One person described "knowing that this is the only window of time that you can get some sleep during the day is a real pressure." Another recounted that "if I did not fall asleep after work right away I was sunk. I was scared to return to work shortchanged on sleep. I would lie there and not be able to fall asleep and kept thinking about how tired I would be later at work." Another said "When you work nights, your whole rhythm is off. Your body wants to sleep at night."

Some tried to exercise on their way home or at home. Going for a short walk outside was helpful. Most relied on a strategy of eating as a coping response. The additional calories in comfort foods were rationalized as soothing and rejuvenating. A few reluctantly resorted to sleeping medications. One man said "I had no choice but to take sleeping pills. I didn't like that about myself....on narcotics. I felt trapped but it was necessary to survive the job. I got off of nights and sleeping pills just as soon as I could." One woman entertained the idea of getting a prescription but felt relieved when she discovered she could read herself to sleep with spiritual texts. Novels or television were also found to help. Some drank alcohol to initiate sleep. One said "as a nurse I would never even consider drinking in the early morning... but I couldn't fall asleep.... I was desperate." She eventually decided "it was better to get a sleeping pill prescription".

Maintaining sleep was also problematic. "The rest of the world is awake while you are trying to sleep. They run the vacuum, mow the lawn, the phone rings, children play, the doorbell rings, and life goes on." Another said "It's horrible to awaken and not be able to fall back... your whole sleep cycle is messed up." Strategies to prevent being awakened

included running a background noise maker, use of a fan or air conditioner, or posting do-not-disturb bedroom door signs. However, needing to hear the phone ring for emergencies or being able to know whether children needed attention made noise prevention techniques impractical. One recounted that she always slept with the phone next to her head, but slept through the ring several times. "One day the school kept calling but I was in such a deep sleep...I eventually awoke one hour later."

3.2.3 Lost day off to recovery - The day after working nights isn't really a day off

Most found they needed to spend their day off in recovery after working one night shift or several in a row. This was described as the "lost day" or "recovery day". Some described a "basically wasted day" due to a lack of sufficient energy even after sleeping for an adequate period. Others thought it might be "psychological" and felt "sad over not being able to get back into the normal day-time routine". One indicated "I end up sleeping too much on that day because I feel deprived or cheated out of sleep so often," and "I have to force myself to get going for my family." Comfort during recovery was sometimes found by remaining in pajamas until it was necessary to dress and go out. Utilizing this time in self-care was also helpful. Some scheduled a massage or an exercise session on the way home. Enjoyment of a "well deserved day off" began by "grabbing a little unpressured sleep knowing work is not where I have to go that night."

3.2.4 The tradeoff - Sacrificing sleep for family, children or other responsibilities

Parents often sacrificed sleep to care for family or children. Participation in home and outside activities, including school or church, was considered justification for sleep loss. Attention to needs of a home, family, children, or friends resulted in additional sources for sleep deprivation. Although for some this was sporadic, for others it became a daily way of life. Choice of the night shift for the benefit of one's family was considered worth the cost of lost sleep. The ability to care for sick children during the day was also valued. For some, the choice was deliberately made so as to be present during the day for children's needs. One mother told of working years on nights and sacrificing sleep in order to be available for her son throughout his schooling, saying "I can't imagine not being there for him." Participation in school activities, homework and social engagements was important. Sleep sacrifice for family gatherings, birthday parties and holiday events was sometimes worth its cost.

3.2.5 Safety risks - Driving home safely and caring for children while sleepy

Driving home from work while sleepy was dangerous. Solutions included "driving home with windows open or playing the radio on high volume." One woman talked with her husband all the way home on her cell phone and another with her friend in order to stay awake. Others took a short nap in the parking lot before heading home or stopped along the way. Some drank coffee or ate while driving.

Nurses reported instances of falling asleep while driving and waking up "a few lanes over while on the parkway." Others admitted to "falling asleep at red lights" and "waking up at the light when the person behind me had to get out of his car to bang on my window." Another confessed to "horns honking that woke me up at the light." The effects of exhaustion were felt even when the drive home was short. A desperate response was to pray all the way home and asking God to "help me get home in one piece"

Providing safe care for children at home was also difficult. Some were able to have a babysitter or family member watch the children while they "got even a few hours of sleep". Others were not as fortunate and had to design creative solutions. One technique was to lock a toddler in the bedroom with mother while she slept. Another was to sleep on the floor near children who "played and crawled around me." One mother connected her hand to her baby's foot with a ribbon as he played on the floor. She remembered that "if he moved too far from me it would wake me up. I had no other choice. I wanted to keep him safe and I was so, so exhausted. I'd prop him up next to me and hug him as he played with his toys and looked at television. I'd doze on and off and get some real sleep when he took his nap. That was all the sleep I could get if I worked a few nights in a row. I was a zombie on those days."

3.2.6 The job follows me home

Concerns of work issues and difficult patient cases often "followed" nurses home. They had to learn to disengage from work at the end of a shift so that sleep and home life would not be affected. One tactic involved socialization with co-workers or stopping for a "quick morning snack to talk over the work night." This way of "debriefing" helped when "we meet at the cafe." Sometimes a spouse would not be able to understand why a nurse found it difficult to release the stress inherent in this work. A valuable skill was to compartmentalize work stress and then focus on significant others and family. One noted that "I felt stressed about the critical and dying patients. At the same time I felt stressed to be the perfect mother and wife. It was hard to get things right at home and make everyone happy when I felt so stressed from work, tired, short on sleep, and pressured to be upbeat. I just wanted to relax but (responsibilities) at home wouldn't let me."

3.2.7 Strained normal - Trying to preserve relationships and marriages

A potential risk concerned the weakening of relationships with one's spouse or significant other. One woman described her marriage as a "strained normal". One newly married nurse said her husband came home shortly before she had to leave for work. She coped in making dinner and "dressing up." She created "special times" together before she had to "hurry off to work". Relationship issues ranged from "supportive" to "stressed out" to "I hope this doesn't cause a divorce!" Planning special times together on a regular basis was a way to cope. As one said "I make sure that we go out together at least once a week, even if it's just to take a walk and talk".

3.2.8 Social isolation

The participants experienced degrees of social isolation from old friends due to differences inherent in day and night work. One man said "I have all I can do to work, go to school, and help with the kids. My wife also works full time days. Forget social things. We gave that up for now." Coping included staying connected by social media and making new friends at work.

3.2.9 Family and friends don't understand - Especially if they never worked nights

One respondent summarized that, "unless they have had night work experience it's hard for them to understand. You have to explain about your sleep needs... if they really want you to be at a party or event, they need to think about your work and sleep." Some consequences were missing social functions, holidays, and religious activities. Another corollary was an increased distance from former friends. Adaptation to this loss was subsequently found in trying to make new work friends. Keeping a family "happy" was a priority. Participants reported it was "extra hard" to maintain relationships. One recalled that her "family appreciate me being very clear about holidays or birthdays. We worked it out so I can attend too... once we all celebrated Thanksgiving a week earlier so I could be there too."

3.2.10 Health concerns - Poor nutrition, lack of exercise, and stress

A sense of stress was predominant. A representation of this was that "this wasn't for me, it was making me sick. I knew I had to get off nights the first chance I got. My circadian rhythm was off...I felt upside down or inside out. It just wasn't good for my health... or social life." Weight gains were often attributed to long-term job pressures. A popular maxim was that "we say work nights – gain 50 pounds." Others complained "I gained 10 pounds in 6 months from bad eating." Another said "salads or healthy food aren't appealing at 2:00 AM... so I eat comfort foods." A solution was planning meals and "always bring healthy food to work... it takes time to pack up but it's worth it." Challenges included trying to establish healthy routines for diet and exercise and ensuring sufficient sleep. They coped by "making it a priority." Additional concerns were assuring healthy eating habits for family members. As one mother recounted, "I leave for work at 6 pm.... so I leave a healthy dinner on the stove... on my day off I shop and cook all day to freeze a week's meals." Ongoing domestic chores focused on prioritized meals and laundry as "the necessities."

3.2.11 Unable to meet personal ideals

The ability to care for one's family, children, or older parents was placed at risk. The ideal dream of parenting or functioning as a committed family member was stretched far out of reach at times. Accommodations to this paradigm included limiting participation in functions or activities. One such rationalization was expressed in "you just have to let go and do the best you can... prioritize each day... choose what's important...like your sleep, time with the kids, your husband, taking a shower, *etc.*.. housework is always last, except you do need clean clothes." They had to "take it one day at a time", and "not get upset if it isn't going like you want... working nights is not exactly being the ideal homemaker... there's no way that's possible... my house is a mess."

3.2.12 Positive benefits of working the night shift

Nevertheless, many found there were benefits. To be present for family was often considered worth the challenge to one's health due to loss of sleep. Priority was given to quality child care, schoolwork, event attendance, appointments, or sick child care. Opportunities to learn nursing skills on quiet nights were also possible, but only if on-site support was available.

3.2.13 Coping strategies

Coping strategies were offered for nurses entering night shift work. A summary of the most commonly described strategies is provided below (see Table 4).

3.2.14 Suggestions for institutional change

Suggestions were offered for managerial/institutional improvements (see Table 5). Some of the participants felt that such institutional changes might never happen.

Table 4. Coping strategies for nurses entering night shift work

Plan Organiza Prioritiza Paranal & Homa Lifa	Plan & organize as much as possible. Prioritize.
Plan, Organize, Prioritize Personal & Home Life	Plan things to be done on days off.
Don't Bring Work Stress Home	Debrief/decompress when leaving work. Find a way to unload daily work stress (exercise,
Don't bring work Stress Home	talk with co-workers after work). Have a quick breakfast out together or talk on phone.
Exercise Often	Walk any time; walk after work for even a short time. Join a gym if possible and make sure
Exercise Often	to go there.
Follow a Healthy Diet	Avoid junk food, plan meals, bring food to work, stay hydrated, keep supplies & healthy
Tonow a meaning Diet	food at home.
Stay Balanced and Emotionally Healthy	Spend time outside, time with nature. Avoid living in darkness and sleeping away the
Stay Balanced and Emotionary relating	daylight. Enjoy a little pleasant sunshine.
Preserve Family	Arrange quality special times with loved ones, even if brief.
Be Socially Active	Stay in contact with old friends. Make friends with others who work nights and have
Be Socially Active	compatible schedules.
	Ask family & friends to support you, explain sleep needs. Ask that they try to plan activity
Enlist Support of Family & Friends	dates & times with your work schedule in mind. Don't be afraid to ask for a little help when
	needed.
Think Positive & Take Advantage of Day Time	Look for the advantages gained by working nights.
Opportunities	Try to find enjoyable activities you might otherwise miss.

Table 5. Suggestions for institutional change

Permit RNs to rest/sleep at night in a separate break area or lounge with comfortable chairs or recliners	
Increase managerial effort to become more interactive with the night staff	
Provide resources and options for night staff to discuss how they are functioning	
Earlier schedule availability and flexibility	
Onsite gym access for before and after shifts or during night breaks	
Onsite childcare options including periodic drop in and sick care	
Offering 8 and 12 hour night shift options instead of only 12 hour	
Offering job sharing shift exchanges and other types of work flexibility	

4. DISCUSSION

This research involved a group of registered nurses in the US. They lived within New York City and suburban and rural areas across Long Island. They worked as registered nurses in both small and large sized hospitals. One worked in a skilled nursing facility. Most had a bachelor's degree and worked as staff nurses. Because this research was qualitative, it is not generalizable to a wider population. Research on other populations may yield differing results. This research contributes to knowledge about the nurse's family and social role outside of the workplace. Nurses can benefit from information about how others have learned to function as a spouse, parent, or friend while working night shift.

Insights were provided into how family and social life were disrupted and how coping skills were individually devised without formal guidance or resources. Few suggestions were offered by the study participants' colleagues. None had learned how to contend with such issues during nursing school or through employee in-service programs. The nurses had to learn to cope with negative issues and function with family and friends. They described varying degrees of support and tolerance from families and spouses. Newey and Hood (2004)^[25] found that compassion and empathy within this context were critical to coping and tolerance. Some of the participants in this study fared better than others as evidenced by their self-report. Some had greater difficulty with inadequate rest or missing nocturnal sleep.

Sleep disturbances and the impact on life outside of work^[3,4] were confirmed by this study. Participants described their efforts to initiate and maintain sleep after work. They had difficulty obtaining adequate rest due to family responsibilities and/or circadian rhythm disturbances. Some chose to give up sleep in order to meet family obligations. Being present for family was also described as a potential benefit; however, all preferred more restorative nocturnal sleep. Napping on the job was rarely an option.

Problems of insufficient sleep have also been reported in the literature. There is a clear need for researched interventions related to sleep at home and as a workplace nap. At this time, the benefits of an on-shift nap remain inconclusive. Home responsibilities may have an effect on the success of such remediation.^[21] Sleep disturbances have been associated with the ability to drive home from work safely.^[13] The nurses in this study confirmed such dangers and described some techniques used to help them get home.

Many of the participants experienced symptoms of sleep work disorder.^[28] Some developed effective ways to cope which may warrant further study. Sleep work disorder (SWD) occurs in vulnerable individuals who experience sleepiness during the work shift, sleep disruption before or after work, or insomnia. Individuals who have such symptoms do not need a clinical diagnosis of SWD to benefit from countermeasures including good health practices, sleep hygiene, and exercise.

This study adds information on the strains and stress of life outside of work. Some participants felt socially isolated and had to work at preserving family life and relationships. They conceded that personal ideals may be out of reach while working nights. The potential for night duty as a negative impact on a nurse's physical and psychosocial life was noted. Anticipatory guidance for nurses new to night duty and ideas for continuing education and administrative changes were described.

There were a number of issues in the literature that were not voluntarily expressed by nurses in this study. These included increased infections, hypertension, headaches, gynecological and fertility problems, work injuries, and increased sick calls. Driving safely home was an issue for the study participants but they were fortunate in that they did not have any driving accidents.

5. CONCLUSION

The recommendations, coping strategies, and adjustments to working the night shift that were identified in this study would benefit from further testing. The main findings centered around sleep issues. Themes included feeling "obsessed" with sleep, restorative sleep problems, losing a day to recovery, sacrificing sleep for family or children, driving safely home, caring safely for children, worrying about workplace issues when at home, preservation of relationships, social isolation, inability of family/friends to understand, poor nutrition and exercise, stress, "juggling" everyday tasks, and not meeting "ideals" as desired.

The overwhelming conclusion was that night duty can negatively impact personal/family life. Strong implications for self-care and in areas of family care exist. Although sharing knowledge about the impact of night work with one's co-workers is important, the nurses in this study found that there was rarely time for this during work. There was also found to be a lack of any formal guidance and support as related to the issues expressed. Recommendations for institutional improvements included comfortable lounge/rest areas, onsite gym and child-care, work flexibility including eighthour shift options, earlier scheduling, job-sharing, increased night managerial interaction, and options for staff discussion. Findings of this study serve as a prelude to further investigations to determine guidelines or interventions. Such knowledge may raise awareness for nursing school curricula, institutional policy, and staff satisfaction. Additional support CONFLICTS OF INTEREST DISCLOSURE might involve healthy workplace nutritional offerings and in-service programs for anticipatory guidance.

The authors declare that there is no conflict of interest statement.

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