



Professional characteristics and work attitudes of hospital nurses who leave compared with those who stay

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Abstract

Aim: To compare characteristics and attitudes of nurses who resigned and those who remained in two Israeli hospitals and assess the reasons for leaving.

Background: Nurse turnover is a current global problem in health care system, especially given the severe nurse shortages. Retention of nurses requires an understanding of the characteristics of the resigning nurses, their attitudes and their reasons for leaving.

Methods: A matching case-control study was conducted among 100 resigning nurses and 200 matched remaining nurses. Questionnaires were used to survey the professional characteristics and attitudes of the participating nurses. In addition, exit interviews were used to assess the reasons to leave of resigning nurses.

Results: Resigning nurses had higher education, less seniority and fewer managerial positions compared with remaining nurses. In addition, resigning nurses had lower professional autonomy and higher aspirations for professional advancement. The reasons to leave cited by the resigning nurses were distance of the workplace from home and working conditions as well as aspiring for professional advancement.

Conclusions: The interface between high education and having few opportunities for advanced positions may lead to resignation.

Implications for Nursing Management: We recommend organisational interventions for training new hospital nurses through professional career path development, such as mentoring programme.

KEYWORDS

attitudes, autonomy, job satisfaction, personnel development, retention, turnover

1 | BACKGROUND

Nurse turnover is an ongoing and pressing problem for health care systems globally (Brook et al., 2019; Halter et al., 2017). In recent years, this problem has become more acute due to the global shortage of health workers—a major challenge for health care systems worldwide (Van der Heed & Aiken, 2013). Today,

we are witnessing the severe implications of this situation, in the face of the global crisis of the COVID-19 pandemic. The global trend of nurses' turnover is apparent in Israel as well. A national study carried out in 2008-2009 among 3,000 Israeli nurses chosen from the Ministry of Health Nursing Administration database revealed a hospital nurse turnover rate of 23% (Toren et al., 2012).

Kerzman and Van Dijk authors contributed equally.

Turnover or resignation may refer to termination of a job within the organisation, initiated by the employee or by the organisation. In this study, we refer to voluntary resignation initiated by the employee only. Employee turnover is a painful and economically costly situation that numerous health systems face worldwide (North et al., 2013). Turnover incurs recruitment and training costs, as well as periods of lower skills and efficiency of new employees when compared with veteran employees acquainted with the organisation and its procedures (Roche et al., 2015). In addition to the negative economic effects, short staffing and turnover have a social impact. The burden that remaining nurses must bear due to shortages in human resource and frequent turnover is among the main factors causing job stress, decreased motivation, decline in work satisfaction and a negative influence on social relationships (O'Brien-Pallas et al., 2010). Frequent turnover also conveys to remaining staff members that there are other employment opportunities available and can cause an increase in intent to leave or actual resignation.

In order to improve retention and reduce turnover of nurses in the workplace, it is important to both identify and analyse the predictors of nurse turnover. Previous studies identified several main factors associated with nurse turnover, among them personal and professional characteristics such as job tenure, level of professional experience and age. Specifically, younger, less tenured and less experienced nurses had stronger turnover intentions (Brook et al., 2019; Chan, et al., 2009; Chang et al., 2019; De Gieter et al., 2011). However, inconsistent findings were found regarding the association between the level of education and nurse turnover; while some studies show that nurses with higher education have lesser tendency to resign, other show the opposite (Hayes et al., 2012). Additional studies suggested attitudinal factors that associate with nurse turnover, such as job overload, stress and burnout (Chan et al., 2013; Hayes et al., 2012; Leiter & Maslach, 2009); attitudes towards the job and the profession; and other available employment opportunities (Lo et al., 2018; Lu et al., 2019; Nei et al., 2015). One more important factor that was suggested to affect nurses' turnover and retention is lack of opportunities for professional development and advancement (Chang et al., 2015; Goh et al., 2016; Lee, et al., 2009; Pung, et al., 2017). Yet, only few studies examined how these career barriers are associated with nurses' turnover, indicating a research gap (Chang et al., 2019).

1.1 | Nursing in Israel

Israel is facing a growing nursing shortage (Aaron & Andrews, 2016) and, like other countries in the world, is struggling to meet the needs of its population (Maier & Aiken, 2016). Israel has a relatively low percentage of nurse per population among OECD countries, with 6.05 nurses per 1,000 residents (Ministry of Health, 2019), compared with an average of 8.8 nurses in countries who are members of the Organization for Economic Co-operation and Development (OECD, 2019). Regarding nurses' education, the rate of nurses with

an academic degree is growing and about 18% hold a master's degree (Nirel et al., 2012). Nursing is mainly taught on the baccalaureate level in universities and academic schools of nursing. These schools are also responsible for post-basic clinical education for registered nurses (RNs) working in the specialized clinical areas (Toren, Kerzman, & Kagan, 2011). In 2019, approximately 44% of the practised nurses are graduates of post-basic education (Ministry of Health, 2019), a 15% growth from 2010. However, it is unclear whether this growth in the health workforce will be sufficient to meet the health care system needs in the future (Tomblin Murphy et al., 2016).

Research on nurses' retention in Israel reveals that expectation for promotion was one of the main factors associated with nurses' retention (Nirel, et al., 2012). Other factors were social benefits, salary, workload and interpersonal relationships. In terms of personal characteristics, Nirel et al. (2012) found that young nurses are less satisfied and less committed to their profession. Specifically, the survival rate for working in the profession among young nurses (77% after 10 years) was found to be significantly lower than among nurses of middle or mature age (96% after 10 years).

In this study, we aimed to identify the characteristics of resigning nurses in Israel, focusing on their professional characteristics and attitudes. Cross-referencing these factors with the reasons for resignation cited by the nurses gives an in-depth insight into predictive elements contributing to resignation. Analysis of these predictors could then be applied in preventative interventions of excessive turnover, promotion of nurse retention as well as in further research.

2 | METHODS

2.1 | Research design

A case-control study was designed to compare a group of resigning nurses with a similar group of non-resigning nurses. Case-control studies identify subjects by outcome status (in our study, resignation) and compare them, retrospectively, with subjects without the outcome but from the same population (Song & Chang, 2010). This design allows isolating the predictors of certain outcome, while controlling for background factors that are similar between the two groups of subjects; and is well suited to explore rare outcomes (Mann, 2003). In our study, we focused on personal and professional characteristics and attitudes that predict resignation, while controlling for age, gender or department type.

2.2 | Setting and sample

The study group included all resigning hospital nurses from two chosen hospitals that responded to the interview during 2012. One hundred nurses who were leaving their hospital job during 2012 were surveyed close to their departure and were

compared with a matched group of 200 hospital nurses who did not leave in that year. All 300 nurses were sampled from two government hospitals in the centre of Israel. Both hospitals serve a diverse patient population, are affiliated with teaching and academic institutions, are government-funded with no co-pay required and are geographically accessible to most populations (central and well connected via transportation). The first hospital is one of Israel's largest hospitals with approximately 1500 beds and the second is a midsized hospital with approximately 700 beds. The sample size proportionally reflected the hospital size ($n = 240$ from the first hospital and $n = 60$ from the second hospital).

2.3 | Sample estimation

Our sample size estimation was based on the rate of resigning nurses at the hospital in 2 years before the study, which was 94 leaving nurses left (not including retiring or resigning for health reasons). Assuming response rate of 50%, we estimated that we would get responses from 45 resigning nurses. According to the same estimation, from two medical centres, we would get 100 resigning nurses (about 200 resigning nurses with 50% response rate). As for the remaining nurse group, we chose to double this number, since this population is easier to obtain. Thus, the sample size was 100 resigned nurses and 200 remained nurses.

2.4 | Data collection procedures

Resigning nurses were interviewed regarding their reasons for leaving close to their time of actual resignation. This time frame, termed 'exit interviewing', provides a more realistic measure of resignation parameters. Researchers have particularly noted the advantages of exit interviewing for mapping reasons for leaving among nurses who actually left, over other methods that examine intentions and wishes of leaving, which may not culminate in actual leaving (Doyle & Roberts, 2013). Use of survey data regarding *intent* to resign/remain as a measure of turnover is problematic regarding prediction of *actual* turnover (Morrell, 2005). Additionally, collection of data regarding reasons for leaving and attitudes towards work was conducted at a party unconnected with the hospital and not at the hospital itself, allowing for more frankness in the responses.

Telephone interviews were performed by trained interviewers next to date of nurse resignation (several days to 1 week after resignation) to obtain data on reasons for resignation, job satisfaction, perception of quality of patient care and perception of professional autonomy, and burnout. A similar phone interview was conducted with nurses in the control group. Response rate to telephone interviews was 67% among resigning nurses and 76% among remaining nurses.

2.5 | Ethical consideration

Participants were informed about the aim of the study, and that their participation was voluntary and that they were entitled to terminate their participation at any time. The nurses were asked for verbal consent at the beginning of the survey. The study was approved by the Institutional Helsinki Committee (8530-11-SMC).

2.6 | Outcome measures

Perceived professional autonomy was measured based on Breugh's (1999) Scale of Work Autonomy. It consists of five items on a five-point Likert scale from 1 = low autonomy to 5 = high autonomy. In this study, the internal consistency reliability was Cronbach alpha =.75.

Job Satisfaction was measured based on literature review (Chan et al., 2009). It consists of seven items on a five-point Likert scale from 1 = low job satisfaction to 5 = high job satisfaction. In this study, the internal consistency reliability was Cronbach alpha =.84.

Occupational satisfaction was measured by three items developed by the researchers on a five-point Likert scale from 1 = low occupational satisfaction from occupation to 5 = high occupational satisfaction. The three items refer to satisfaction with being a nurse, aspiring for advancement and intention-to-leave nursing profession. The three items were analysed separately.

Burnout was measured based on Shirom & Melamed (2006) scale for burnout. It consists of 14 items on a seven-point Likert scale from 1 = low burnout to 7 = high burnout. In this study, the internal consistency reliability was Cronbach alpha =.92.

Perception of quality of patient care was measured by nine items developed by the researchers on a five-point Likert scale from 1 = low quality of patient care to 5 = high quality of patient care. In this study, the internal consistency reliability was Cronbach alpha =.84.

2.6.1 | Personal and professional characteristics

Personal and professional characteristics were gender, age, family status, occupation.

2.6.2 | Reasons for leaving the hospital

All resigning nurses were asked to indicate their reasons for resigning in the form of an open question (Doyle & Roberts, 2013).

2.7 | Data analysis

Data analyses were carried out using SPSS version 23. Descriptive statistics were used to describe demographic and professional

characteristics as well as job attitudes of both resigning and non-resigning nurses. A logistic regression model identifying variables associated with nurses' resigning vs. remaining by professional characteristics and attitudes was then conducted. Content analysis of the reasons for leaving was used to sort all reasons raised by the resigning nurses into five categories. Percentages of the five categories were computed. To conclude the analyses, associations between reasons for leaving and personal characteristics (i.e. demographic, professional and attitudinal) were tested using a multiple response test. A p -value $<.05$ was considered statistically significant.

3 | RESULTS

Among the 100 resigning nurses who participated, 80 (80%) were women at an average age of 33.3 years old ($SD = 7.1$) and the vast majority (86%) were between 20 and 40 years old.

Table 1 shows that resigning nurses, compared with remaining nurses, have lower seniority in the hospital and lower seniority in the department. Notably, fewer resigning nurses, compared with remaining ones, hold managerial positions, and inversely, more of them hold a master's degree and specialized post-basic education.

Table 2 shows the differences in work attitudes between the resigning and remaining nurses. Specifically, resigning nurses report lower levels of professional autonomy than remaining nurses and higher aspirations for professional advancement. Difference in job satisfaction between the groups was only marginally significant, indicated that the resigning nurses were less satisfied than remaining nurses. On a scale of 1-5, both groups reported low interest in

leaving the nursing field (around 2), a high quality of patient care (around 4) and high satisfaction from being a nurse (around 4).

Table 3 presents the results of the logistic regression of which variables were associated with nurse resignation. Among the personal and professional factors, significant factors associated with resignation were low seniority in hospital, no managerial position and having a graduate-level education (i.e. a master's degree). None of the work attitude factors was significant. However, perceived professional autonomy was marginally significant ($p < .09$), suggesting that a perceived low level of professional autonomy was related to nurses leaving.

The resigning nurses cited multiple reasons for leaving as follows: working conditions related (32% of the reasons), distance from work (including relocation) (28.5%), lack of professional advancement (14.8%), family-related reasons (including maternity leave) (11%) and personal issue-related reasons (9.3%). In addition, associations between reasons for leaving and personal characteristics were tested using a multiple response test.

Table 4 shows a significant association between holding a master's degree and citing a desire for professional advancement as a main reason for resigning. Nurses holding managerial positions were associated with dissatisfaction with their work conditions.

4 | DISCUSSION

4.1 | Professional and personal characteristics

This case-control study explored characteristics and attitudes of nurses who resigned and those who remained in two major Israeli hospitals. Our findings show that the professional characteristics

TABLE 1 Differences in the frequencies and percentages of nurses between the groups of resigning and remaining nurses across characterizing variables

| Personal/professional characteristics | Resigning nurses $n = 100$ | | Remaining nurses $n = 200$ | | p -value |
|---------------------------------------|----------------------------|------------|----------------------------|------------|---------------------|
| | Frequency | Percentage | Frequency | Percentage | |
| Married | 66 | 66.0 | 138 | 69.0 | .34 |
| Employed spouse | 58 | 87.9 | 106 | 78.5 | .08 [†] |
| Has children | 58 | 58.0 | 137 | 68.8 | .04 [*] |
| Born in Israel | 35 | 35.0 | 66 | 33.0 | .51 |
| Seniority in hospital ≤ 1 year | 22 | 22.0 | 16 | 8.0 | 001. ^{**} |
| Seniority in hospital ≤ 2 years | 39 | 39.0 | 41 | 20.5 | 001. ^{**} |
| Seniority in dept. ≤ 2 years | 45 | 45.0 | 59 | 29.5 | 006. ^{**} |
| Managerial positions | 9 | 9.0 | 54 | 26.6 | 001.> ^{**} |
| Master's degree | 30 | 30.0 | 38 | 19.0 | .02 [*] |
| Post-basic education | 64 | 64.0 | 86 | 43.0 | 001.> ^{**} |
| Full-time employment | 50 | 50.0 | 107 | 53.5 | .31 |

Note: The two groups of nurses are matched by age, gender and department. Among resigning nurses, 80% were women, average age = 33.3 ($SD = 7.1$).

[†] $p < .1$.

^{*} $p < .05$.

^{**} $p < .01$.

TABLE 2 Differences in attitudes (means and SDs) between the resigning and remaining nurses

| Attitudes | Resigning nurses n = 100 | | Remaining nurses n = 200 | | p-value |
|---|-----------------------------|--------|-----------------------------|--------|------------------|
| | Mean | SD | Mean | SD | |
| Perceived professional autonomy | 3.71 | (.62) | 3.91 | (.69) | .01** |
| Job satisfaction | 3.93 | (.56) | 4.06 | (.68) | .08 [†] |
| Burnout | 2.99 | (1.15) | 3.13 | (1.15) | .32 |
| Perception of quality of patient care | 4.29 | (.52) | 4.30 | (.48) | .95 |
| Satisfaction with being a nurse | 4.05 | (1.07) | 4.20 | (.98) | .12 |
| Aspiring for professional advancement | 4.36 | (.98) | 4.01 | (1.22) | .02* |
| Intending to find a job outside of the nursing profession | 2.10 | (1.33) | 1.97 | (1.29) | .50 |

[†]p < .1.

*p < .05.

**p < .01.

TABLE 3 Logistic regression to identify variables associated with nurses' resigning

| Variables | B | OR | 95% CI | Sig |
|---------------------------------------|-------|------|-----------|------------------|
| Seniority in hospital | -.10 | .90 | .84-.97 | .004** |
| Master's degree (no, yes) | .93 | 2.53 | 1.33-4.83 | .005** |
| Managerial position (no, yes) | -1.19 | .30 | .13-.71 | .006** |
| Post-basic education (no, yes) | .01 | 1.01 | .58-1.77 | .96 |
| Has children (no, yes) | .08 | 1.08 | .60-1.93 | .79 |
| Aspiring for professional advancement | .37 | 1.44 | .71-2.91 | .30 |
| Perceived professional autonomy | -.33 | .72 | .49-1.05 | .09 [†] |

[†]p < .1.

*p < .05.

**p < .01.

of resigning nurses include leaving their jobs in early career, holding fewer managerial positions and having a higher level of academic education and post-basic education. About 23% of leaving nurses did so during their first year, and 39% left within 2 years of employment in the organisation. These findings are consistent with previous studies (e.g. Brook et al., 2019; Chan et al., 2009). A recent cross-sectional study with 524 full-time hospital nurses in Taiwan showed that less experienced nurses express higher intention of resignation (Chang et al., 2019). According to another study, intent to leave among nurses with <5 years of experience was 4.6 times higher than that of veteran nurses (Chan et al., 2009). Resignation of young and inexperienced nurses can be explained by their limited personal resources to cope with the complex and stressful working conditions in the hospital. Inexperience and immaturity can make it difficult for the younger nurses to function under stress conditions. Indeed, it was shown that new nurses often experience higher levels of stress and job dissatisfaction

TABLE 4 Percentage of resigning nurses by characteristics and cited reasons interface

| | Work conditions | Distance from workplace | Professional advancement | Family | Work issues |
|----------------------|-----------------|-------------------------|--------------------------|--------|-------------|
| Managerial position | | | | | |
| No | 36.4 | 29.7 | 12.1 | 12.7 | 9.7 |
| Yes | 41.2 | 11.8 | 35.3 | 5.9 | 5.9 |
| Post-basic education | | | | | |
| No | 38.8 | 20.9 | 19.4 | 7.5 | 13.4 |
| Yes | 35.7 | 32.2 | 11.3 | 13.9 | 7.0 |
| Academic education | | | | | |
| Non-academic or BA | 40.3 | 29.5 | 8.5 | 10.1 | 11.6 |
| Master's degree | 28.3 | 24.5 | 28.3 | 15.1 | 3.8 |
| Employment | | | | | |
| Part time | 42.7 | 19.8 | 21.9 | 8.3 | 7.3 |
| Full time | 30.2 | 37.2 | 5.8 | 15.1 | 11.6 |

compared with veteran nurses (Zhang et al., 2016). Negative attitudes towards their first job cause them to leave the department and the organisation and even to leave nursing as an occupation.

Higher education was also a main predictor of resignation. Whereas previous studies show inconsistent findings regarding the association between education level and nurse turnover (Hayes et al., 2012), our findings indicate that more educated nurses, and specifically nurses with master's degree, are more likely to leave. The interface between holding managerial qualifications (master's degree, post-basic education) and having few opportunities for advanced positions creates frustration and low organisational commitment. Nurses with master's degree and no managerial position were almost three times more likely to resign than nurses with either a bachelor's degree, a training diploma or a managerial position. The number of educated nurses in Israel is growing, and this creates expectations of these nurses to have more challenging roles in hospitals and for more interesting career advancement opportunities.

4.2 | Attitudes of nurses

In the 'attitudes towards nursing' category, both the resigning group and the remaining group showed no differences in the attitudes of job satisfaction, burnout, perception of quality of patient care, satisfaction with being a nurse and intention of finding a job outside of the nursing profession. However, two attitudes differ between the two groups: aspiring for professional advancement and need for professional autonomy, which were higher among resigning nurses. Lack in opportunities for professional development was found in previous research (Chang et al., 2015; Goh et al., 2016; Pung, et al., 2017); however, insufficient attention has been paid to this issue (Chang et al., 2019). Surprisingly, two highly common predictors of nurses leaving described in the literature, namely, low job satisfaction and high burnout (e.g. Leiter & Maslach, 2009; Lo et al., 2018), were found to be equal in both groups indicating that these factors did not predict resignation.

4.3 | Reasons for leaving

In our findings, distance from workplace and working conditions were cited by hospital nurses as the main reasons for leaving. However, deeper analysis of the reasons revealed that 'distance' often referred to cases of the family's relocation within Israel which necessitated a job replacement, or immigration to other countries, obviously leading to resignation, while a long commute was only a partial element in the 'distance' factor. It is interesting to note that about 15% of the reasons for leaving cited by the resigning nurses in the open question were related to lack of professional advancement. This reason was highly associated with the employment characteristics of (frustrated) aspirations to hold an advanced position in the department and with having a graduate education. Consistent with our

findings, recent studies identified ambition for professional promotion and advancement as a strong motive (Chang et al., 2015; Chang et al., 2019). Thus, we believe that human resource units in hospitals should allocate more attention and efforts to provide young educated nurses with opportunities for professional development.

The current 'brain drain' of highly educated nurses can potentially be dammed by offering a broader range of responsibilities on the managerial spectrum. We suggest moving away from a dichotomous approach to the allocation of management positions (either that one is or is not a manager). Rather, a diverse organisational approach involving staff inclusivity both in decision-making and in responsibility-taking can open more satisfying opportunities for autonomous positions within the department leading to higher management positions over time. Additionally, today's hospital trends point towards a necessary loosening of the hierarchical division of doctors' and nurses jobs and responsibilities to better distribute the overall workload. With foresight and attention, the highly trained and educated nurses can be included in this trend. Performing jobs of greater interest and responsibility will hopefully lead to higher organisation commitment and job retention of nurses. It is the hospital's best interest to show more flexibility in job parameters as well as more awareness of nurses' aspirations and capabilities. Creating a forum to allow nurses the opportunity to express their expectations of their career trajectory might help identify in advance those nurses with greater aspirations. This must take place early in the employment track since as our findings show frustrated nurses leave within a brief term of work in the organisation of <3 years and some even <1 year.

Our findings could be interpreted by applying Herzberg's two-factor model (Herzberg, 1987). The theory suggests that intrinsic factors (i.e. aspects of the work that relate to the work tasks, such as autonomy, challenge, responsibility) affect job satisfaction, whereas extrinsic factors (i.e. aspects of the work that are external to the work tasks, such as physical work conditions, security and salary) affect job dissatisfaction. Previous research showed that both intrinsic and extrinsic factors are associated with intention to leave (e.g. Goh & Lopez, 2016). Our findings emphasize the importance of intrinsic factors, specifically autonomy and opportunities for advancement, in the decision of nurses to resign, suggesting that nurturing intrinsic satisfaction among nurses would increase nurse retention.

4.4 | Limitations

This study has a number of potential limitations. The study population included nurses employed by two acute care hospitals. While they are representative of this category, it is possible that reasons for turnover are different among nurses employed in other settings, such as community care clinics. Also, the study may include information misclassification bias as to the real reasons of nurses for leaving. We attempted to avoid this by employing interviewers who were not connected in any way to the two hospitals and by

emphasizing to the participants why we are conducting the study and that their participation will be entirely anonymous. The possibility for selection bias remains despite the matching case-control methodology since not all persons were included as the control group.

4.5 | Implications for nursing management

Hospitals have complex working conditions, heavy workload, job stress and demand to work full time including shifts and weekends. For young inexperienced nurses, these highly stressful conditions impose a physical and emotional burden, with limited possibilities to provide the safe, high quality and patient care they were trained for in nursing school. One suggested intervention to help young nurses in their first year is establishing a mentoring programme. Mentoring can foster nursing self-efficacy and competency and create a supportive workplace environment. As suggested by Zhang et al. (2016), for successful mentoring programme, mentors should be rigorously selected and the training programme should be suitable for the nurses, taking into account potential barriers such as time constraints and scheduling limitations.

There is a need to focus on interventions to retain the new staff through developing professional career paths and providing more autonomy, especially for young, part-time and educated nurses (Kerzman, Van Dijk, Eizenberg, et al., 2015). It is even more important today, during the difficult and troubling days of the COVID-19 pandemic with the immense burden, it entails on health systems worldwide, to give full attention to the nursing staff, which stands together with all the medical staff at the forefront of patient care. This includes taking care of the well-being, satisfaction and the ability of nurses to recover from the heavy workload, as well as providing them with a promising professional horizon. These needs are to be considered by health care leaders, as well as national leaders.

5 | CONCLUSIONS

Retention of nurses is at highest priority today in the midst of the global crisis caused by the COVID-19 pandemic. Identifying the factors characterizing resigning nurses and analysing these in conjunction with the reasons cited for leaving highlighted a particular association between holding graduate degrees and the unfulfilled aspiration for promotion and higher achievements in the field. Although practical considerations unrelated to nursing specifically, such as maternity leave and relocation affected the decision to resign, the job-related reasons for resignation were notably focused on the desire for professional advancement and low levels of autonomy. These observations lead to the understanding that in order to retain highly qualified nurses more must be done. To ensure effective interventions aimed at new nursing staff retention, these should focus on developing career advancement tracks and professional autonomy.

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ETHICAL APPROVAL

The Institutional Helsinki Committee 8530-11-SMC approved the study.

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