Jordanian nurses’ job satisfaction, patients’ satisfaction and quality of nursing care

M.T. Mrayyan RN PhD
Vice Dean, Assistant Professor, The Hashemite University, Faculty of Nursing, Zarqa, Jordan

Purpose: To study nurses’ job satisfaction, patients’ satisfaction, and quality of nursing care in a Jordanian educational hospital.

Design: A descriptive cross-sectional comparative design was used. The total populations at the educational hospital where the study was conducted were: 200 nurses (response rate 60%), 510 patients (response rate 49%), and 26 head nurses (NHs) (response rate 92%). Mueller/McCloskey Satisfaction Scale (MMSS) 1990; Eriksen’s (1988) scale of The Satisfaction with Nursing Care; and Quality of Nursing Care Questionnaire-Head Nurse of Safford & Schlafeldt (1960) were used to measure the phenomena of interest.

Findings: Nurses were ‘neither satisfied nor dissatisfied’ in their jobs, nurses who work in wards reported a slightly better job satisfaction than nurses who work in critical care units. Patients reported that they were ‘moderately’ satisfied, and head nurses reported that nurses ‘usually (practically)’ provide a high of quality of nursing care. There were no significant differences between critical care units and wards in regard to patients’ satisfaction and quality of nursing care.

Conclusions: Jordanian nurses’ job satisfaction is on the borderline, which arguably requires more interventions. Patients’ satisfaction and quality of nursing care have to be enhanced to reach the levels of ‘very satisfied’ and ‘always’ consecutively.

Keywords: Job Satisfaction, Jordan, Patient Satisfaction, Quality Nursing Care

Introduction
Globally, major changes have taken place in all health care systems. The Jordanian health care system is experiencing major changes, notably in its scarcity of resources and centralized control. These changes include shortened lengths of hospital stay, increasing emphasis on cost effectiveness, and an increase of patients with acute and chronic diseases (Baker et al. 2000; Curtin 2000). These escalating changes in health care systems influence nurses’ job satisfaction, patients’ satisfaction, and quality of nursing care.

Nurse dissatisfaction and turnover result from many factors. Many nurses have felt that they were devalued in their job (Kettle 2002) and that profits are placed over patients (Fletcher 2001). Dissatisfied nurses may be distracted from their patients, fail to provide holistic care, and in general, provide a lower quality of nursing care. All of these factors together may have a negative impact on patients’ satisfaction.

Purpose
The overall purpose of this research was to study nurses’ job satisfaction, patients’ satisfaction, and quality of nursing care in a Jordanian educational hospital. The researcher investigated whether the relationships between the studied phenomena differ across different types of critical care units and wards. Specifically, this study aims to answer the following research questions:
1. What variables influence nurses’ job satisfaction?
2. What variables influence patients’ satisfaction?
3 What variables influence the quality of nursing care, as perceived by the head nurses (HNs)?
4 What are the differences between critical care units and wards in regard to the studied phenomena? and
5 What are the relationships between nurses’ job satisfaction, patients’ satisfaction, and quality of nursing care?

Significance of the study
Internationally, numerous studies have focused on patients’ satisfaction but in Jordan this has not been the most concerning factor. In Jordan, health care is provided almost free through centralized systems such as the Ministry of Health and Royal Health Services. This is the first Jordanian nursing study that relates the concept of nurses’ satisfaction to patients’ satisfaction and quality of nursing care.

Literature review

Nurses’ job satisfaction
Job satisfaction is defined as ‘the degree to which employees like or enjoy their jobs’ (McCloskey & McCain 1987, p. 20). Much has been written about nurses’ job satisfaction and few studies have been conducted on this concept in Jordan. The variables that influence job satisfaction include: (1) demographic variables (age, sex, intelligence, education, experience, and position in the hierarchy); (2) job characteristics (status, autonomy, repetitiveness, tasks, job outcomes, and pay); and (3) organizational environment factors (type of unit, nursing care delivery model, degree of professionalization, organizational climate, supervision, and interpersonal relationships (Hinshaw & Atwood 1984; Al-Ma‘aitah et al. 1996; Kettle 2002).

Nurses’ job dissatisfaction has been reported as the primary predictor of intent to leave, and organizational commitment (Ingersoll et al. 2002; Larrabee et al. 2003). Surveying more than 43,000 nurses in five countries (USA, Canada, Scotland, England, and Germany), Aiken et al. (2001) found that nurses reported decreasing standards of care and high levels of nurses’ burnout and job dissatisfaction. Job satisfaction levels are lessened over the years, a finding which is influenced by years of experience, job position, geographical area, and hospital retirement plans (Chung et al. 2003).

A limited number of Jordanian studies have been conducted to identify factors influencing nurses’ job dissatisfaction and estimate the magnitude of anticipated withdrawal from practice (AL-Abbadi 1992; Suliman & Abu Gharbieh 1996). The results showed that Jordanian nurses were generally dissatisfied with working conditions (transportation and child care facilities), payment, administrators’ support, professional growth and development, marital status, education, work experience, income, and shifts worked. The annual withdrawal rate among Jordanian nurses was reported to be 18.4%.

Patients’ satisfaction
Patients’ satisfaction with nursing care has become an important goal of any health care organization and an outcome measure of care (Titler 2001; Zimmermann 2001). Patients’ satisfaction is defined as the degree of congruence between the expected quality of nursing care and the actual received care (Grujic et al. 1989; Scarding 1994). A recent study showed that nurses strongly influence patients’ retention (Freda 2000). Professional nursing practice was found to influence organizational and patients’ outcomes (Mark et al. 2003). Spence Laschinger & Almost (2003) identified patient’s satisfaction as a nurse-sensitive outcome.

A Medical Survey (2002) found the following variables to influence patients’ satisfaction: top management commitment; linking of patients’ satisfaction scores with employee and management monetary incentives; and recognition of employees who contribute to patients’ satisfaction (Available at: (http://www.medicalsurveys.net/tips/patient_satisfaction_tip10.htm)). Determinants of patients’ satisfaction include, but are not limited to, gender and familiarity with the number of physician visits (Esterhai et al. 1998). Patients varied in their level of satisfaction; Gines et al. (2002) reported that medical patients are more satisfied than non-medical patients, while Middletown et al. (2002) reported that surgical patients have higher levels of satisfaction than medical patients.

Quality of nursing care
Quality of nursing care is defined as care that is provided according to hospitals’ standards and job requirements (Grujic et al. 1989). Determinants of quality of nursing care include: adequate skills and numbers, caring attitudes, effective communication, efficient organizational and management systems, effective community participation (High Seas Traders 2002), staffing data (staff mix and nursing care hours) and data about patients’ outcomes indicators [falls, skin integrity, nosocomial infection rates and satisfaction (Loan et al. 2003)].

In summary, nurses’ job satisfaction and patients’ satisfaction are closely related concepts, which influence the quality of nursing care.

Method

Design
A descriptive cross-sectional comparative design was considered the most appropriate for this study in a developing country such as Jordan, in which satisfying the basic human needs comes first (Brink & Wood 1998).
Sample and data collection procedures
The study was conducted in an educational hospital with 304 beds. The total populations involved in the study were 200 nurses, 510 patients, and 26 HNs. Nurses, patients, and HNs were selected from 11 critical care units and four wards. One hundred and twenty nurses completed the nurses’ job satisfaction questionnaire (response rate 60%; n = 41 from critical care units and n = 79 from wards). Two hundred and fifty patients’ satisfaction questionnaires were returned (response rate 49%; n = 73 from critical care units and n = 177 from wards). Twenty four questionnaires to measure HNs’ perceptions about quality of nursing care were returned (response rate 92%; n = 19 from critical care units and n = 5 from wards). Data were collected on April 2003 over 2 weeks.

Variables and instruments: reliability and validity
All tools used a 5-point Likert scale. All instruments have well-established psychometrics (Huber et al. 2000). Conceptual and operational definitions of study’s variables and psychometrics are shown in Tables 1 and 2.

The demographic variables of nurses and HNs in this study were: gender, marital status, shift worked, time commitment, level of education, age, and years of experience in nursing and in current area of work. The demographics of the hospitals were: type of units/wards, unit/ward’s average daily census, unit/ward’s organizational structure, model of nursing care delivery, unit/ward’s decision making style, financial situation of the hospital, and dominant changes that influence the hospital. The demographics of the patients were: gender, marital status, level of education, age, diagnosis, and length of stay.

Ethical consideration
Approvals for conducting the study were obtained before conducting the study. The anonymity of participants and confidentiality of their responses were ensured by: (1) using numerical codes for questionnaires (2) assuring nurses, patients, and HNs that they have the right not to participate in the study without penalty (3) destroying the data at the end of the study, and (4) assuring nurses that only the overall results would be shared with the nursing administration for the purpose of designing the needed managerial interventions.

Table 1 The conceptual and operational definitions of study’s variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Conceptual definition</th>
<th>Operational definition</th>
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<tbody>
<tr>
<td>Nurses’ job satisfaction</td>
<td>The degree of positive affect one feels about his/her employment (Price &amp; Mueller 1986)</td>
<td>Nurses’ satisfaction with extrinsic rewards, scheduling, family/work balance, co-workers, interaction, professional opportunities, praise/recognition, and control/responsibility</td>
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<tr>
<td>Patients’ satisfaction</td>
<td>‘The degree of congruency between a patient’s expectations of ideal nursing care and his/her perception of the real nursing care he/she receives’ (Risser 1975, p. 46)</td>
<td>Patients’ satisfaction is the degree to which nursing care meets patients’ expectations in terms of art of care, technical quality, physical environment, availability and continuity of care, and the efficacy/outcomes of care</td>
</tr>
<tr>
<td>Quality of nursing care</td>
<td>Care that is provided according to standards and the job’s requirements (Grujic et al. 1989)</td>
<td>Head nurse’s perceptions of quality of nursing care provided to patients in critical care units or wards</td>
</tr>
</tbody>
</table>

Table 2 Tools’ psychometric properties

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tools’ original psychometrics</th>
<th>Tools’ reported psychometric properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses’ job satisfaction</td>
<td>Mueller/McCloskey Satisfaction Scale (MMSS) (1990). Cronbach’s alpha 0.52–0.84. It has construct validity, the cutoff for item loading on factor was 0.40. Correlations on subscales ranged from 0.53 to 0.75 for similar dimensions which demonstrated Criterion-Related Validity</td>
<td>Cronbach’s alpha = 0.84 for the 31 items</td>
</tr>
<tr>
<td>Patients’ satisfaction</td>
<td>Eriksen (1988) The Satisfaction with Nursing Care Questionnaire. The correlation coefficient between predicted and obtained exponents was 0.93. The tool has content, predictive, and construct validity</td>
<td>Cronbach’s alpha = 0.88 for the 35 items</td>
</tr>
<tr>
<td>Quality of nursing care</td>
<td>Safford &amp; Schlotfeldt (1960) Quality of Nursing Care Questionnaire-Head Nurse. It has content and predictive validity</td>
<td>Cronbach’s alpha = 0.71 for the 41 items</td>
</tr>
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</table>
Data analysis

Data were analysed using SPSS at alpha level of 0.01 because the study has many variables; significance by chance was eliminated. A number of data analysis procedures were used including means, standard deviations, t-tests, and Pearson product moment correlations. T-tests were used to measure the differences between critical care units and wards in terms of nurses’ job satisfaction, patients’ satisfactions, and quality of nursing care, as these variables were continuous. Pearson product moment correlations were used to assess the relationships between nurses’ job satisfaction, patients’ satisfaction, and quality of nursing care (Agresti & Finlay 1999).

There were some differences in the reporting of nurses and HNs. While a majority of nurses reported the average daily census in their units or ward to be eight patients/day (30.8%, n = 36), HNs reported the average daily census in their units or wards to be 20 patients/day (56.6%, n = 13). Nurses reported that they were working in a unit or ward that used a vertical organizational structure (41.7%, n = 48); however, HNs reported that they were supervising a unit or ward that used a horizontal organizational structure (47.4%, n = 9). While nurses reported the financial situation of their hospital to be moderate (51.8%, n = 59), 61% (n = 14) of HNs reported that the financial situation of their hospital was strong (60.9%) (n = 14). Both nurses and HNs agreed that heavy workload was the dominant change that influenced the hospital [72.8% (n = 80) and 60.9% (n = 14) respectively].

The majority of patients in the whole sample were women (60%, n = 150) and married (55%, n = 137). One hundred and five nurses (42%) had an educational qualification that is less than the diploma (42%, n = 105). The average age of patients was 40 years old, diagnosed to have a surgical condition (59%, n = 148) with an average length of stay of 3 days (54%, n = 134).

The whole sample mean for total job satisfaction was 2.74 (SD = 0.50) ‘neither satisfied nor dissatisfied’ [2.55 (SD = 0.50)] for nurses in critical care units and [2.93 (SD = 0.49)] for nurses in wards. The mean for total patients’ satisfaction was 3.71 (SD = 0.68) ‘moderately satisfied’ [3.63 (SD = 0.67)] for nurses in critical care units and [3.79 (SD = 0.68)] for nurses in wards. The mean for total quality of nursing care for the whole sample was 3.68 (SD = 0.45) ‘usually (practically)’ [3.83 (SD = 0.41)] for HNs at critical care units and [3.52 (SD = 0.49)] for HNs at wards).

Variables of nurses’ job satisfaction

To answer the first research question, nurses’ perceptions about their job satisfaction were assessed. Means and standard deviations were calculated for each item of job satisfaction scale for the whole sample. The scale was rated as: 1 = very dissatisfied, 2 = moderately dissatisfied, 3 = neither satisfied nor dissatisfied, 4 = moderately satisfied, and 5 = very satisfied. A mean for each subcategory of the job satisfaction scale was calculated. Nurses reported their job satisfaction as follows: with: co-workers (x = 3.32), control/responsibility (x = 3.18), scheduling (x = 2.79), interaction (x = 2.78), external rewards (x = 2.53), and family/work balance (x = 2.37).

Nurses reported that they were ‘neither satisfied nor dissatisfied’ (x ≤ 3) on the following items: (1) external rewards such as salaries, vacations, and benefit packages; (2) scheduling and work opportunities such as working straight days (single shift) and part time, having weekends off per month, scheduled weekends off, and to be compensated for working weekends off; (3) family/work balance chances especially about child care facilities; (4) interaction at work, social contact with colleagues after work, interaction with professionals from other disciplines and the Faculty of Nursing, and belonging to ward and institutional committees; (5) praise/recognition opportunities such as recognition from superiors and peers, opportunities for career advancement, participating in nursing research and publishing, and the amount of encouragement and positive feedback. Nurses were ‘moderately’ (x ≥ 3) satisfied with: (1) co-workers such as immediate supervisors and nursing peers, physicians, and the delivery care system; and (2) control/responsibility such as control over work and what goes in work settings, the amount of responsibility, and participation in organizational decision-making.

Variables of patients’ satisfaction

To answer the second research question, means and standard deviations were calculated for each item of patients’ satisfaction scale. The scale was rated as above for nurses’ satisfaction. Patients reported their level of satisfaction as follows: nurses’ availability (x = 4.01), technical quality of nurses (x = 3.86), physical environment (x = 3.73), art of care (x = 3.69), efficiency/outcome of care (x = 3.68), and continuity of care (x = 3.51).

Variables of quality of nursing care

To answer the third research question, HNs’ perceptions about the quality of nursing care that nurses provide in their units or wards were surveyed. Means and standard deviations were calculated for each item of quality of nursing care scale for the whole sample. Variables of quality of nursing care were ranked in descending order based on their reported means. The scale was rated as: 1 = never, 2 = seldom, 3 = sometimes, 4 = usually, 5 = always. Adding the scores of all items in the scale and then dividing by the total number of items established an average score for quality of nursing care scale. HNs reported that the nurses ‘usually (practically)’ (x = 3.75) provided a high level of quality of care.

HNs reported the most important five variables that influenced quality of nursing care (x ≥ 4) to be: having enough time to com-
plete assignments, availability of nurses to assist physicians, having enough time to carry out orders for medications and treatments on time, having time to keep supplies and equipment readily available, and having time to keep supplies and equipment in good condition. On the other hand, HNs reported that having time to make proper planning for continued care after discharge as the least important variable that influenced quality of nursing care ($\bar{x} < 3$).

The differences between critical care units and wards

To answer the fourth research question, $t$-tests were performed. There was a significant difference between nurses’ job satisfaction in critical care units as compared to those in wards ($P < 0.002$): nurses who were working in wards reported a slightly higher level of job satisfaction ($\bar{x} = 2.93$) than those who were working in critical care units ($\bar{x} = 2.55$, Table 3). Also, there were no significant difference between critical care units and wards in terms of patients’ reported levels of satisfaction. Patients were ‘moderately’ ($\bar{x} > 4$) satisfied especially in terms of the privacy provided by nurses, organization of nurses when caring for patients, and getting nurses when needed. Finally, a $t$-test indicated that there was no significant difference between critical care units and wards in regard to quality of nursing care.

The relationships between nurses’ job satisfaction, patients’ satisfaction, and quality of nursing care

To answer the fifth research question, the total score for nurses’ job satisfaction was correlated with the total score of patients’ satisfaction ($r = 0.291$), this correlation was significant at 0.01. The total score for nurses’ job satisfaction was correlated with the total score of quality of nursing care ($r = 0.460$), this correlation was not significant. The total score of patients’ satisfaction was correlated with the total score of quality of nursing care ($r = 0.430$), this correlation was significant at 0.01.

### Discussion and implications

The purpose of this research was to study nurses’ job satisfaction, patients’ satisfaction, and quality of nursing care in a Jordanian educational hospital. The study results have implications for practice, education, and for research in nursing.

For practice, taking into consideration the use of one setting and sampling technique in the current study, the results were interpreted with caution. The results of this research showed that nurses who work in wards reported a slightly better level of job satisfaction than nurses who work in critical care units. Such a difference could be explained as follows: nurses who work in critical care units deal with more severely ill patients and with death and dying issues (Bratt et al. 2000). Nurses in critical care units seek more autonomy and involvement in clinical decision-making than nurses in wards; autonomy is an important aspect of job satisfaction (Bowler & Mallik 1998). In the current study, external rewards and family/work balance had the lowest overall means. As these were low, there is a need to increase extrinsic work values such as salary, vacation, fringe benefits, and the flexibility of work schedules. These values are considered to be important to promote job satisfaction. For example, limited availability of time off promotes frustration and dissatisfaction (Kettle 2002). Also, to increase nurses’ job satisfaction in educational settings, nurse administrators have to promote: family/work balance factors especially maternity leave time and child care facilities. However, it is important to report that the current level of satisfaction of Jordanian nurses is better than what Suliman & Abu Gharbieh (1996) reported; currently nurses ‘neither satisfied nor dissatisfied’ while in 1996 they were ‘dissatisfied’.

As the lowest reported means by the patients, it is important to focus on the art of nursing care, and the efficiency and the continuity of care to have high levels of patients’ satisfaction. Considering nursing as an art requires special training courses to enhance the technical quality of nursing, which would reflect positively on the continuity and outcomes of care. This will not suddenly hap-

### Table 3  Comparisons of total scores of nurses’ job satisfaction, patients’ satisfaction, and quality of nursing care between critical care units and wards

<table>
<thead>
<tr>
<th>Total scores</th>
<th>Whole sample</th>
<th>Critical care units</th>
<th>Wards</th>
<th>*$T$-test</th>
<th>'Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>$\bar{x}$</td>
<td>SD</td>
<td>n</td>
<td>$\bar{x}$</td>
</tr>
<tr>
<td>1 Nurses’ job satisfaction</td>
<td>120</td>
<td>2.74</td>
<td>0.50</td>
<td>41</td>
<td>2.55</td>
</tr>
<tr>
<td>2 Patients’ satisfaction</td>
<td>250</td>
<td>3.71</td>
<td>0.68</td>
<td>73</td>
<td>3.63</td>
</tr>
<tr>
<td>3 Quality of nursing care</td>
<td>24</td>
<td>3.68</td>
<td>0.45</td>
<td>19</td>
<td>3.83</td>
</tr>
</tbody>
</table>

SD, standard deviation.
*Equal variances are not assumed.
'Significance (2-tailed).
pen; nurse administrators have to establish positive work environments, employee training programmes, and proper staffing ‘availability of nurses.’

From both quality and patients’ perspectives, nurses should be more involved in planning for continued care after discharge. Readmission is usually accompanied with more complications that increase patients’ length of stay in hospitals. In the current study, the staffing level was reported also by HNs to influence the quality of nursing care. Staff nurses need to have enough time to do their assignments, help physicians, and carry out medications and treatments. As indicated in the literature, quality of nursing care was found to have a statistically significant positive influence on nurses’ perceptions of job satisfaction (McGillis Hall 2002), which in turn would influence patients’ satisfaction. Surgical patients in this study were reported to have a higher level of patients’ satisfaction than medical patients; this finding is supported by the results of Middletown et al. (2002).

It is important to mention the considerable variations between the findings of the HNs and the ordinary nurses, such as the average, patient’s length of stay, and perceptions of the organizational structure. These differences suggest that HNs may have had a more optimistic view of their hospital than the nurses. Also, this may suggest that the HNs tend to exaggerate about how much their units or wards are overloaded. Practically, nurses are more involved in patient care than the HNs, thus nurses may give the realistic views of their work environments and patient care. More investigations of these differences are warranted.

In the current study, the total score of patients’ satisfaction was correlated positively and moderately with the total score of quality of nursing care. It was noted that the score of quality of nursing care in critical care units was higher than wards; however, the score of patients’ satisfaction was lower. This could be explained by the presence of highly specialized medical and nursing teams, along with the presence of advanced equipment and nursing care delivery systems at critical care units. The low scores of patients’ satisfaction in the critical care units could be related to the severity of patients’ conditions and the use of extensive invasive and non-invasive interventions in such units.

Overall, patient-based improvement goals should be initiated to enhance patients’ satisfaction and quality of nursing care. Specific employee-performance expectations with regard to keeping patients satisfied could be stated in nurses’ job descriptions.

For education, courses that focus on nursing leadership and management are available in most Jordanian universities; however, more focus has to be given to nurses’ job satisfaction, patients’ satisfaction, and quality of nursing care. Nurse managers have to be prepared and provided, on continuous basis, with continuing education courses that focus on these variables to promote positive images of their hospital. Nursing leadership has been found to have a statistically significant positive influence on nurses’ perceptions of job satisfaction (McGillis Hall 2002).

For research, this study is considered as a baseline for further research that could explore in depth the issues of nurses’ job satisfaction, patients’ satisfaction, and quality of nursing care with a larger sample of nurses, patients, and HNs. Patients’ satisfaction scores might be linked to incentives given to nurses such as recognition letters. Quality of nursing care has to be assessed through patients who receive the care and nurses who provide it. Means of nursing care hours, and specific types of medical and surgical patients should be studied further to assess the influence of these variables on patients’ satisfaction and quality of nursing care. Further research is needed to explore managerial interventions that would enhance nurses’ job satisfaction, patients’ satisfaction, and quality of nursing care.

Limitations
This study was conducted in one type of hospitals through a convenience sampling procedure. Multiple types of hospitals and random sampling techniques have to be used in future research.

Summary and conclusions
Job satisfaction of staff nurses, satisfaction of patients, and quality of nursing care should be the major concern of any organization. A descriptive cross-sectional comparative design was used in this study. A convenience sample was obtained from an educational hospital. Nurses reported their job satisfaction to be at the borderline level (neither satisfied nor dissatisfied), patients were ‘moderately’ satisfied, and HNs perceived that nurses ‘usually (practically)’ provide a high level of quality care. The study highlights the importance of nurses’ job satisfaction and quality of nursing care on patients’ satisfaction. Given the centrality of the Jordanian health care system, it is important to enhance nurses’ job satisfaction to produce positive outcomes for their patients and hospitals.

As a long-term investment, hospitals have to promote themselves as work environments that support job satisfaction to attract nurses, and as hospitals that support patients’ satisfaction and quality of nursing care to attract patients. In this regard, top management commitment is an essential milestone in job and patients’ satisfaction as well as quality of nursing care.

The results of this study are not generalizable to other nurses, patients, and HNs in other educational hospitals because of convenience sampling technique, and the conduct of the study in one type of hospitals.

Acknowledgements
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References


