Opinions of Nurses and Midwives on the Implementation of Clinical Practice Guidelines

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Abstract

Background: Clinical practice guidelines offer systematic explanations which target the goals of improving the patients’ mental, physical and behavioral health. They are designed to help caregivers make decisions about patients under specific conditions.

Purpose: This study aims to determine the opinions of nurses and midwives about the implementation of clinical practice guidelines prepared specifically for gynecology and obstetrics clinics.

Methods: This cross-sectional study was conducted with the nurses and midwives working in the obstetrics and gynecology clinics. The study was completed with a total of 118 nurses and midwives who volunteered to participate in this study. Clinical practice guidelines were prepared specifically for the gynecology and obstetrics clinics in line with the literature. The opinions of nurses and midwives were evaluated six months after the guidelines were first used in the clinics. The data were collected March 2017.

Results: A majority of the nurses and midwives reported that use of the clinical practice guide enabled them to provide a high level of quality basic care for each patient. The guideline also helped them to save time in clinical practices, because it facilitated access to practical and up-to-date information. Also, the guidelines provided a common language and directions for evidence-based practices for care giving; and it increased the quality of care. They also considered the guidelines useful for new nurses and midwives, as well as student nurses and midwives.

Conclusion/ Implication for practice: A majority of the nurses and midwives considered that the clinical practice guidelines were beneficial and effective for clinical practices. This study reveals the importance of cooperation in the use of clinical practice guidelines.

Key words: Clinical Practice Guidelines, Guideline of Implementation, Midwife, Nurse

Introduction

Today, nursing and midwifery are struggling to create a common language, to reach a professional identity, and to become visible in the healthcare system. For this purpose, tools such as models, healthcare plans, or clinical practice guidelines are used in nursing and midwifery. Clinical practice guidelines offer systematic explanations which target the goals of improving the patients’ mental, physical and behavioral health. They are designed to help caregivers make decisions about patients under specific conditions (Cook, Greengold, Ellrodt, & Weingarten, 1997; Hollon et al., 2014).

The benefits of the guidelines can be categorized under three titles: benefits for healthcare personnel, benefits for hospitals and benefits for institutions (Kurtcu & Beji, 2015). Their benefits for healthcare personnel include forming the basis of patient care (Yakisan & Set, 2013),
increasing the quality of care (Miller & Kearney, 2004; Scott, Denaro, Bennett, & Mudge, 2004), and enabling healthcare personnel to access up-to-date information easily (Darling, 2002; Goud, Hasman, Strijbis, & Peek, 2009; Graham, James, & Cowan, 2000). Their benefits for patients include providing access to cost-effective, evidence-based care and ensuring patient safety (Koh, Manias, Hutchinson, Donath, & Johnston, 2008; Shackelton, Marceau, Link, & McKinlay, 2009). Their benefits for health institutions include reducing costs in these institutions, and having a positive effect on the institutional culture by influencing healthcare personnel to change their behaviors (Miller & Kearney, 2004). The American College of Obstetricians and Gynecologists also recommends the use of guidelines in order to standardize patient care and increase the quality of care (ACOG, 2015). However, the usefulness of the guidelines depends on its proper use. The guidelines will not be useful if they are not properly used.

Clinical practice guidelines are important in terms of reducing clinical uncertainties, providing better care, and saving time. In the literature, nurses reported that the guidelines positively affected patient care outcomes, healthcare practices and interdisciplinary teamwork, and enabled healthcare personnel to become more efficient and save time while providing patient care (Bahtsevani, Willman, Stoltz, & Ostman, 2010; Ritchie & Prentice, 2011). In the study of Alanen, Välimäki and Kaila (2008), nurses stated that the guidelines are practical tools used in patient care that strengthen the evidence-based nursing practices.

Caregivers need to know that guidelines are beneficial for their patients, and the system they use is appropriate for the implementation of the guidelines. Proper use of the guidelines requires adequate time, equipment, well-qualified personnel, and interdepartmental coordination (Yakisan & Set, 2013). Studies have indicated that nurses and midwives demonstrated positive behaviors in the use of the guidelines, and that leaders should be supportive in order to ensure the successful use of the guidelines (Bahtsevani et al., 2010; Offerhaus, Fleuren, & Wensing, 2005; Stenber & Wann-Hansson, 2011). Yagasaki and Komatsu (2011) reported that successful use of the guidelines was ensured by removing individual, interdisciplinary and organizational barriers (Yagasaki & Komatsu, 2011). Ploeg, Davies, Edwards, Gifford, and Miller (2007) stated that the barriers of individual implementers, social attachment, and organizational and environmental commitment should also be addressed, in order to remove barriers to the clinical use of the guidelines.

Studies conducted in Turkey have shown that nurses and midwives need classification lists and guidelines for clinical practice. The use of such lists and guidelines will enable quicker access to more patient information, and a more cohesive, systematic healthcare delivery (Ay 2008; Kurtcu & Beji, 2015). The literature review showed no studies indicating the effects of standard care guidelines on the quality of healthcare, on the patient, and on personnel satisfaction in nursing and midwifery practices in Turkey. Studies analyzing the healthcare guidelines are needed in order to develop a standard for healthcare, and to create a common language in patient care and treatment.

In this study, clinical practice guidelines were produced specifically for gynecology and obstetrics clinics to help nurses and midwives step-by-step during their caregiving. This study aims to determine the opinions of nurses and midwives about how clinical practice guidelines contribute to clinical practices.

Purpose of the Study

This study aims to determine the opinions of nurses and midwives about the implementation of clinical practice guidelines prepared specifically for gynecology and obstetrics clinics.

Methods

Design and Participants

This study employed a cross-sectional survey design to answer the research questions. The study was conducted with the nurses and midwives working in the obstetrics and gynecology clinics of a university hospital and in the obstetrics clinics of a training and research hospital in eastern Turkey between June 2016 and March 2017. The university hospital had a gynecology clinic and an obstetrics clinic. The training and research hospital had 2 gynecology clinics, 7 obstetrics clinics, 1 gynecology intensive care unit, and 1 gynecology emergency clinic. These clinics have a high potential for a high patient census. During this period, 144 nurses and midwives were working in the
training and research hospital and 17 nurses and midwives were working in the university hospital, in the said clinics.

The sample size was calculated to be 114 with a 5% confidence interval. The study was completed with a total of 118 nurses and midwives who were working in the clinics during the study period, and volunteered to participate in this study. Clinical practice guidelines were prepared specifically for the gynecology and obstetrics clinics in accordance with the literature (Fischer, Lange, Klose, Greiner, & Kraemer, 2016; Penney & Foy, 2007; Pyon, 2013). The guidelines were prepared by Y.D.O. and M.D., specialists in gynecology and obstetrics. Any existing barriers should be removed to ensure the use of clinical practice guidelines. Studies have shown that factors such as lack of motivation, non-supportive management within institutions, patients’ health status, inadequate access to resources, and the education level of healthcare personnel can pose a barrier to the implementation of the guidelines (Fischer et al., 2016; Koh et al., 2008; Stokes et al., 2016). In order to overcome such barriers, the literature recommends that both personnel and management be educated on the clinical practice guidelines, and supported in their implementation (Fischer et al., 2016; Hollon et al., 2014; Stokes et al., 2016). The literature also emphasizes that consensus is needed. Seminars, and workshops should be presented on the use of the guidelines (Miller & Kearney, 2004; Scott et al., 2004). Table 1 shows the methods used in this study to ensure active use of clinical practice guidelines by clinic personnel.

### Table 1. The interventions carried out to remove the barriers to implement the clinical practice guidelines

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Aim</th>
<th>Application of the Interventions in the Clinics</th>
</tr>
</thead>
</table>
| **Education and communication** | To inform and educate the clinic personnel in advance.              | • The opinions of the supervisor nurses and the personnel in the clinic were obtained during the planning of the guidelines.  
• The importance and necessity of the guidelines for patient care were discussed.  
• A meeting was held with the nurses and midwives to introduce the guidelines. |
| **Participation and commitment** | To ensure collaboration during the planning and implementation of the guidelines. | • All stages of the planning and implementation of the guidelines were shared with the clinics.  
• G.U.I., an education nurse and one of the authors of this study, worked in the clinics of the training and research hospital as the implementer of the guidelines.  
• In the university hospital, the supervisory nurses of the obstetrics and gynecology clinics provided support for the implementation of the guidelines. |
| **Facilitation and support**   | To facilitate the use of the guidelines and make them accessible.   | • The guidelines were e-mailed to the implementer nurses and uploaded to the clinic computers in .pdf format, and were given to the clinics in booklet format. |
| **Interviews and agreement**   | To increase motivation in the use of the guidelines.               | • Feedback was obtained to maintain the implementation of the guidelines.  
• The feedback obtained from the clinic personnel was shared with the other groups. |
June 2016
Interview with clinic personnel, determining the necessity of the guides

June 2016 - August 2016
Preparation of the guidelines, literature review, production of evidence-based guidelines

September 2016
Holding meetings to introduce the guidelines, distributing the guidelines in the clinics

September 2016 - March 2017
Active use of the guidelines in the clinics

A gynecology and an obstetrics clinic in Dicle University hospital
Total: 17 nurses and midwives

2 gynecology, 7 obstetrics, 1 intensive care, and 1 emergency clinic in the Maternity Hospital
Total: 144 nurses and midwives

March 2017
Administration of the questionnaire asking opinions of the nurses and midwives

All of the nurses and midwives in the university hospital were reached.

In the maternity hospital, A total of 101 nurses and midwives were reached.

March 2017
The study report was written.

Figure 1. Study Plan and Schedule
Table 2. Socio-demographic Characteristics of the Participants (N=118).

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Number (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (X ±SD)</td>
<td>33.09±7.58</td>
<td></td>
</tr>
<tr>
<td>Profession</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwife</td>
<td>79</td>
<td>67</td>
</tr>
<tr>
<td>Nurse</td>
<td>39</td>
<td>33</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical vocational high school</td>
<td>33</td>
<td>28</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>6</td>
<td>5.1</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>76</td>
<td>64.4</td>
</tr>
<tr>
<td>Postgraduate education</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>Clinic where they work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstetrics</td>
<td>11</td>
<td>92</td>
</tr>
<tr>
<td>Gynecology</td>
<td>78</td>
<td>9.3</td>
</tr>
<tr>
<td>Gynecology intensive care</td>
<td>8</td>
<td>6.8</td>
</tr>
<tr>
<td>Gynecology emergency</td>
<td>7</td>
<td>5.9</td>
</tr>
<tr>
<td>Years of experience (X ±SD)</td>
<td>11.27±6.87</td>
<td></td>
</tr>
<tr>
<td>Total years of working in the current clinic (X ±SD)</td>
<td>4.83±5.25</td>
<td></td>
</tr>
</tbody>
</table>

Table 3. The Use of the Clinical Practice Guideline by the Nurses and Midwives (N=118)

<table>
<thead>
<tr>
<th>Frequency of using the guideline</th>
<th>Number (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least once a week</td>
<td>76</td>
<td>64.4</td>
</tr>
<tr>
<td>At least twice a week</td>
<td>30</td>
<td>25.4</td>
</tr>
<tr>
<td>At least three times a week</td>
<td>6</td>
<td>5.1</td>
</tr>
<tr>
<td>At least four or more times a week</td>
<td>6</td>
<td>5.1</td>
</tr>
</tbody>
</table>

The clinical practice guideline is useful

| Yes                              | 116        | 98.3           |
| No                               | 2          | 1.7            |

Having the guideline in clinic computers is useful

| Yes                              | 100        | 84.7           |
| No                               | 18         | 15.3           |

The clinical practice guideline is effective

| Yes                              | 115        | 97.5           |
| No                               | 3          | 2.5            |

The clinical practices guideline should be specifically prepared for and implemented in all clinics

| Yes                              | 113        | 95.8           |
| No                               | 5          | 4.2            |
Table 4. Opinions of nurses and midwives on the clinical practice guideline

<table>
<thead>
<tr>
<th></th>
<th>Agree completely n (%)</th>
<th>Agree to some degree n (%)</th>
<th>Cannot Judge n (%)</th>
<th>Do not agree at all n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The clinical practice guideline enabled the nurses and midwives to provide all patients with healthcare of the same quality.</td>
<td>88 (74.6%)</td>
<td>25 (21.2%)</td>
<td>3 (2.5%)</td>
<td>2 (1.7%)</td>
</tr>
<tr>
<td>The clinical practice guideline enabled the nurses and midwives to save time by facilitating their access to practical and up-to-date information.</td>
<td>89 (66.9%)</td>
<td>38 (32.2%)</td>
<td>1 (0.8%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>The clinical practice guideline enabled the nurses and midwives to use a common language during care giving.</td>
<td>92 (78.0%)</td>
<td>20 (16.9%)</td>
<td>4 (3.4%)</td>
<td>2 (1.7%)</td>
</tr>
<tr>
<td>The clinical practice guideline enabled the nurses and midwives to use the evidence-based practices.</td>
<td>90 (76.3%)</td>
<td>21 (17.8%)</td>
<td>7 (5.9%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>The clinical practice guideline was useful for new nurses and midwives.</td>
<td>95 (80.5%)</td>
<td>19 (16.1%)</td>
<td>4 (3.4%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>The clinical practice guideline was useful for student nurses and midwives.</td>
<td>102 (86.4%)</td>
<td>16 (13.9%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>The clinical practice guideline enabled the nurses and midwives to provide high quality healthcare.</td>
<td>86 (72.9%)</td>
<td>24 (20.3%)</td>
<td>7 (5.9%)</td>
<td>1 (0.8%)</td>
</tr>
</tbody>
</table>

**Data Collection and Analysis**

The data were collected in March 2017. The opinions of nurses and midwives were evaluated six months after the guidelines were first used in the clinics. The data collection form was prepared in accordance with the literature (Dahm & Wadensten, 2008; Koh et al., 2008; Shackelton et al., 2009). The form included a total of 19 questions: 12 questions on socio-demographic characteristics, and 7 questions on the opinions of the nurses and midwives on the use of the guidelines in clinical practice. The questions about the opinions on the implementation of the clinical practice guidelines were answered as agree completely, agree to some degree, cannot judge, and do not agree at all. The data were analyzed using numbers and means in a statistical software.

**Ethical Considerations**

Written approval was obtained from the Noninvasive Clinical Research Ethics Committee prior to the beginning of data collection (No: 2017/69). In addition, written permissions were obtained from the obstetrics and gynecology clinics of the university hospital. Written consent of the clinical supervisors and the nurses and midwives who participated in this study were also obtained.

**Results**

The average age of the participants was 33.09±7.58. Of all the participants, 67% were midwives, 64.4% had a bachelor’s degree, and 92% were working in obstetrics clinics. The average years of experience of the nurses and midwives was 11.27±6.87 years, and the average number of years of working in the clinic of those employed during the study was 4.83±5.25 years.

Of the nurses and midwives, 64.4% used the guideline at least once a week and 98.3% found the guideline useful. Of them, 84.7% considered it useful to have the guideline on the computers in the clinics.

Of the participants, 97.5% found the guideline useful in clinical practices, and 95.8% stated that the clinical practice guideline should be specifically prepared for and used in all clinics.
Table 4 shows the opinions of the nurses and midwives on the clinical practice guideline. A majority of the nurses and midwives reported that the clinical practice guideline enabled them to provide a high level of quality basic care for each patient. The guideline also helped them to save time in clinical practices because it facilitated access to practical and up-to-date information. Also, the guideline provided a common language and evidence-based practices during care giving; and it increased the quality of care. In addition, almost all of them considered that the guideline is useful for new nurses and midwives, as well as student nurses and midwives.

Discussion

In this study, clinical practice guidelines were produced specifically for gynecology and obstetrics clinics as a step-by-step manual for instructing nurses and midwives during their care giving. This study aims to determine the opinions of nurses and midwives about the implementation of the clinical practice guidelines.

The benefits of the clinical practice guidelines can be categorized in three aspects: healthcare personnel, patients and institutions. This section emphasized these three aspects. The benefit of the guidelines for healthcare personnel was to increase the quality of healthcare (Miller & Kearney, 2004; Scott et al., 2004). Guidelines form a basis for an approach to patient care in the healthcare environment (Yakisan & Set, 2013). In addition, clinical guidelines help health professionals to improve their performance and keep up with new developments (Darling, 2002; Goud et al., 2009; Graham et al., 2000). The literature reports that guidelines are practical tools used in patient care that strengthen evidence-based nursing practices for nurses and midwives (Alanen et al., 2008), and positively affect nursing practices and interdisciplinary teamwork (Ritchie & Prentice, 2011). Bahtsevani et al. (2010) indicated that guidelines strengthened evidence-based nursing practices. A majority of the nurses and midwives in the present study also stated that the clinical practice guidelines formed a basis for patient care, enabled them to use evidence-based practices, and increased the quality of patient care. These findings complied with the literature.

The benefit of the guidelines for patients was to improve outcomes by reducing morbidity and mortality. Use of the clinical practice guidelines provided patients with evidence-based care. Use of the guidelines resulted in each patient receiving equal care by reducing the inequalities in healthcare practices. Medical errors were prevented through the reduction of inappropriate healthcare methods. Another benefit for patients of the use of the clinical practice guidelines was reducing healthcare costs (Dans, Dans, Oxman, Robinson, & Acuin, 2007; May, Sibley, & Hunt, 2014; Roberts, Patel, Stone, & Bakken, 2006). In the study by Ritchie and Prentice (2011), nurses stated that using the guidelines positively affected patient care outcomes and nursing practices. In the study of Knops et al. (2010), nurses reported that adhering to the guidelines in clinical practice ensured patient safety and enabled them to save time in patient care. In compliance with the literature, a majority of the nurses and midwives in the present study stated that guidelines ensured that healthcare practices were evidence-based, created a common language, and reduced the inequalities in healthcare practices. The majority also said that using the guidelines helped them to save time in patient care. It was concluded that the guidelines created a common language and increased the quality and standards of patient care.

The guidelines were useful for institutions not only because they positively affected healthcare outcomes, but also, they affected the institutional culture, because they influenced healthcare personnel to change their behaviors (Pilling, 2008). Bahtsevani et al. (2010) reported that guidelines should be supported by both managers and personnel, and continued use of the guidelines should be ensured. Offerhaus, Fleuren and Wensing (2005) conducted a study with 160 midwives and reported that midwives showed positive behaviors when using the guidelines. In the present study, a majority of the nurses and midwives stated that they used the guideline at least once a week, that using the guidelines increased the quality of their healthcare practices, and that they could provide each patient with the same quality care. These statements implied that the guidelines contributed to an increase in the quality of patient care in the institutions in which the nurses and midwives worked.

The literature also reports that clinical practice guidelines support student nurses’ learning in the clinical environment, and helped nurses in providing patient care (Andrews & Roberts, 2003). In parallel with the literature, a majority of
the nurses and midwives in the present study stated that the guidelines were instructive for new and student nurses and midwives. They also stated that the guidelines enabled them to use a common language regarding patient care within their institution. These statements implied that the guidelines contributed to the clinical orientations of new and student nurses and midwives.

The adaptation of the nurses in this study to the clinical practice guidelines, and the positive findings of this study are first attributed to the fact that the possible barriers for the implementation of the guidelines were predicted, and the necessary interventions were made. Cooperation with the supervisory nurses in the clinics in particular is considered highly important in this regard. The second reason for the successful adaptation of the guidelines is considered to be the fact that the guidelines were uploaded to the clinic computers, in order to facilitate access to the guidelines and increase their use. The fact that a majority of the nurses and midwives reported that having access to the clinical practice guidelines on the clinic computers to be useful serves as an indicator of this reason. As a result of all these interventions, more than half of the nurses and midwives used the guidelines at least once a week, which enabled effective use of the guidelines in nursing and midwifery practices.

One of the strengths of this study is that it was conducted in two hospitals in a region with high birth rates within Eastern Anatolia. These hospitals had a high potential for a high patient census. Another strength is the lack of previous implementations of clinical practice guidelines in these hospitals.

Limitations

The limitation of this study is that it was conducted with only midwives and nurses. It is recommended in the literature that cooperation with other healthcare professionals, particularly doctors, be ensured to remove the barriers in using clinical practice guidelines in clinics. (Alanen et al., 2008; Stenber & Wann-Hansson, 2011; Yagasaki & Komatsu, 2011). This study is considered to be limited in this respect.

Conclusion

This study determined the opinions of nurses and midwives about the implementation of clinical practice guidelines prepared specifically for gynecology and obstetrics clinics. Nurses and midwives expressed that clinical practice guidelines were beneficial and effective for clinical practices. In addition, interventions carried out to ensure active use of the clinical practice guidelines and to remove the barriers in using the guidelines were observed to be effective.

Implication for Nursing Knowledge and/or Language Development

Reveals the importance of cooperation in the use of clinical practice guidelines. The findings of this study indicated that nurses and midwives showed positive behaviors while using the clinical practice guideline. Based on these findings, it is recommended that clinical practice guidelines be created specifically to all clinics in line with the requirements of these clinics, and that the results be assessed. In addition, other members of the healthcare team should be included in the implementation of the guidelines. Involvement of patients in decisions which involve them should also be supported by developing patient versions of the guidelines.

Clinical practice guidelines enable health professionals to use the best existing evidence and thereby help them make appropriate decisions in patient care and resolving its problems. Nurses and midwives show positive behaviors when using these guidelines in clinical practices. Finally, the results of the guidelines on the quality of patient care should be evaluated.

References


The American College of Obstetricians and Gynecologists [ACOG]. Clinical Guidelines and Standardization of Practice to Improve Outcomes. Committee Opinion 2015:629. Available at: http://www.acog.org/Resources-And-