The Impact of Ethical Leadership on Knowledge Management Processes: An Empirical Study on Healthcare Professionals in Turkey during the Pandemic Period

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Abstract: Given an increased call for examining ethics in the healthcare sector, this study examines how ethical leadership influences employees' knowledge creation and development, knowledge codification and storage, knowledge sharing and knowledge usage and utilizing in the healthcare sector. Healthcare professionals in Turkey were added to the study to observe the effect of ethical leadership on knowledge management. The questionnaire was sent to 414 healthcare professionals randomly selected from healthcare facilities operating in Turkey via Google Forms. All the response rates were 100%. Results indicate that healthcare professionals' views of their supervisor's use of ethical leadership behaviors are related to knowledge creation and development, knowledge codification and storage and knowledge usage and utilizing. Contrary to other studies, it has been observed that ethical leadership does not affect knowledge sharing, which is a process of knowledge management. It is considered that this situation is the result of the increased workload and intense overtime of healthcare professionals during the pandemic period, and that different achievements will be obtained from the studies to be carried out after the pandemic period. In this study, ethical leadership is positively associated with knowledge creation and development and knowledge usage and utilizing, which is negatively associated with knowledge codification and storage. Perceived ethical leadership behaviors positively influence knowledge management. Based on the findings, implications are provided for both theory and management, and directions for future research are offered.

Keywords: ethical leadership, knowledge management, healthcare sector, pandemic period in Turkey

1. Introduction

In today's world, every institution is constantly faced with chaos due to the COVID-19 pandemic. In this chaotic environment, the characteristics of institutions can have a significant impact on the way they function and the way services are delivered. Therefore, knowledge management is of great importance for institutions. In times of chaos, information is often asymmetrically distributed. Managing the pandemic process based on ethical codes in such an environment largely depends on knowledge management skills. Because knowledge management is one of the most important processes of creating, developing, codifying, storing, sharing and utilizing the knowledge experience of employees within a public organization. Therefore, as companies evolve, they acquire significant institutional knowledge. This knowledge obtained is important for the further development of organizations by contributing to the public life of newcomers and less-experienced staff. For that reason, the most essential aim of knowledge management, which encompasses knowledge creating, codifying, sharing and utilizing is to create the connection of staff looking for information, or institutional knowledge, with the people who have it. This is achieved by sharing knowledge. Because there is a close link between knowledge management and employee motivation and willingness to play an active role in knowledge sharing. However, when there is no knowledge sharing among employees, it is difficult to achieve knowledge management (Wu and Lee, 2017). In addition to this, knowledge may not be sufficient to help leaders to make reasonable decisions and take competitive advantages as expected. So, public organizations need employees who can eagerly share knowledge to others even if they have well-established knowledge management systems.

However, although previous research has stated a strong connection between ethical leadership and knowledge management, the effect of ethical leadership on knowledge management processes except knowledge sharing is yet to be explored. This study aims to strengthen relationship between ethical leadership and knowledge management processes and examine why and how ethical leadership has an impact on knowledge management in the context of healthcare sector in Turkey during the COVID-19 Pandemic Period.
2. Literature on the Relationship between Ethical Leadership and Knowledge Management Process

Ethics is concerned with the kinds of values and morals an individual or a society finds desirable or appropriate. Furthermore, ethics is concerned with the virtuousness of individuals and their motives. A leader’s choices are also influenced by their moral development (Northouse, Peter G., 2016).

2.1 Ethical Leadership

Ethical leadership defined Brown et al. (2005) as ‘the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement and decision-making’. Beauchamp and Bowie (1988) revealed that ethical leadership originated from the principles of justice, respect, community, service, and honesty. Ethical leadership is characterized by fairness, honesty, openness, values, and trustworthiness (Brown and Trevino, 2006). It also can be defined as “the demonstration of normatively appropriate behavior in both personal and interpersonal contexts and the active promotion of socially responsible behavior at all levels in the organization reinforcing a moral ethos through communication and ethical decision making” (Tourigny et al., 2019. Based on the ethical leadership theory, ethical leadership results from situational and individual characteristics that incorporate a moral context and reasoning (Babalola et al., 2019; Bedi et al., 2016; Ciulla, 2005). Johnson (2005) explains four components of ethical leadership: goal, information, authority and trust as the following;

- “goal” means being determined to reach ethical goals.
- “Information” refers searching and justifying the knowledge close and distant environment of the organization.
- “authority” is the power of making decision and acting in accordance with what the decision requires.
- “trust” which is a bridge among the others is the most essential component of all.

Ethical leaders can generate trust among employees and become a role model for his/her organization so that they can prosper and increase their creativity and productivity. Reliable leaders don’t hesitate to use their authority; they gather and use the necessary information.

Being ethical requires not only behaving by taking “right” and “good” into account but thinking about others and being just as well. In this sense, ethical leaders should be a valuable source for the employees, who are keen on ethics, by exhibiting ethical behaviors (Mihelic et al., 2010). In ethical leadership, being a moral person and ethical management are the most crucial factors that make a person reliable and a good leader. As a trait, being a moral person encompasses rightfulness, honesty, and reliability while doing the right thing, being open-minded and open to criticism, just and objective and obedient to ethical codes are of critical importance in terms of behavioral aspect.

2.2 Knowledge Management (KM) and its Processes

Knowledge has been defined as “information possessed in the minds of individuals” (Alavi and Leidner, 2001), or as “individual’s experience and understanding” (Marwick, 2001), or as “a high value form of information that is ready to apply to decisions and actions” (Davenport and Prusak, 1998). Given the growing perception of importance of intellectual resources, it is not surprising that firms have begun to engage in a wide range of strategies to create, store, transfer and apply knowledge within their organizational contexts (Kayworth and Leidner, 2003). In light of this, the KM process can be defined as “the process of capturing, storing, sharing, and using knowledge” (Davenport and Prusak, 1998; Leidner and Kayworth, 2006) or as “a systemic and organizationally specified process for acquiring, organizing, and communicating both tacit and explicit knowledge of employees that other employees may make use of to be more effective and productive in their work” (Alavi et al., 2005). Thus, the KM process is the generation, representation, storage, transfer, transformation, application, embedding and protection of organization knowledge (Schultze and Leidner, 2002; Massey and Montoya-Weiss, 2006). Kankanahalli et al. (2005) have mentioned that the strategic management of organizational knowledge is a key factor in helping organizations to sustain competitive advantage in volatile environments. Organizations are turning to KM initiatives and technologies to leverage their knowledge resources (Kankanahalli et al., 2005). Therefore, the goal of KM is for an organization to become aware of its knowledge, individually and collectively, and to shape itself, so that it makes the most effective and efficient use of the knowledge it has or can obtain (Bennet and Bennet, 2003; Newell et al., 2003; Alavi et al., 2005-2006). To date, the scientific understanding of knowledge in organizations is still in its infancy, in spite of a large and
growing body of literature focused on organizational culture, KM processes and knowledge (Griffith et al., 2003; Alavi et al., 2005-2006; Pawlowski and Bick, 2012).

Kayworth and Leidner (2003) suggested that there are four elements in the KM process: knowledge creation, knowledge storage, knowledge transfer, knowledge application.

However, Sağsan (2006) defines 5 basic steps of Knowledge Life Cycle (KLC) in hierarchical order: creating, sharing, structuring, using, and auditing knowledge.

Previous research have demonstrated that ethical leadership of leaders can change followers’ moral cognition, concerns, or values (Zhu et al., 2011; Sosik et al., 2014), which in turn stimulate employees to engage in behaviors that abide by moral standards (Mayer et al., 2009; Steinbauer et al., 2014). As Ali and Sağsan (2021) indicated that there is a positive relationship between psychological ownership of knowledge and knowledge hiding and this connection is moderated by ethical leadership. Kim and Yun (2015) argued that knowledge sharing is regarded as generous or ethical “donating” behaviors especially in workplaces, which can raise other colleagues’ knowledge level and even improve organizational performance. Even though KM, as an indispensable aspect of organization’s success, is highly emphasized by many companies, few have achieved a sustainable knowledge-based competence for competitive advantage. Team members must make a collaborative engagement for acquiring knowledge as well as provide creative ideas and improve team performance. What is more, it is essential to accumulate knowledge and integrate it into the objective of a company with the help of peer collaboration. In order to achieve these goals, leaders are looking for ways in which they can enhance their organization’s creation and dissemination of knowledge. According to this research, organizational leaders have the capability of creating financial gains and inspiring employees. Leaders who pivot around ethics and morality are fair to taking into consideration of their employees’ rights and freedoms, thus giving them will to complete their duties and work. Taking care of employees has the most crucial importance in organizational structure.

With the current research, it is aim to investigate whether apart from other leadership types, how effective is ethical leadership in the management of asymmetrically distributed knowledge, creating, developing, codifying, storing, sharing and utilizing the knowledge in the healthcare sector.

However, although previous researchers have stated a strong connection between ethical leadership and KM, the effect of ethical leadership on KM processes except knowledge sharing is yet to be explored. This study aims to strengthen relationship between ethical leadership and KM processes and examine why and how ethical leadership impact on KM in the context of healthcare sector in Turkey during the COVID-19 Pandemic Period.

3. Research Methodology and Data Analysis

This paper focuses on the influences of ethical leadership behavior on KM to evaluate all aspects of the healthcare sector in Turkey through the opinions of healthcare professionals. These surveys can also help organize the sector and provide input on a healthcare sector’s strengths and weaknesses.

The study answered four main questions:

- How do the KM processes play in sustaining the ethical leadership behavior of healthcare professionals during the pandemic period? For Example, Is the ethical leadership effect on the creation and development of health-related knowledge? In the same way, the study answered also how ethical leadership has an impact on health-related knowledge creation and development, health-related knowledge sharing and health-related knowledge usage and utilizing.

The study proposed the following hypotheses:

1. H1: Ethical leadership has an impact on knowledge creation and development.
2. H2: Ethical leadership has an impact on knowledge codification and storage.
3. H3: Ethical leadership has an impact on knowledge sharing.
4. H4: Ethical leadership has an impact on knowledge usage and utilizing.

3.1 Population and Sampling

The research universe consists of healthcare professionals that are working in Turkey. Republic of Turkey Ministry of Health announced that the number of healthcare professionals in 2020 was 1.6 million. Appropriate sample size determined the following formula by Yamane (1967).
n = \frac{N}{1+N\times(e)^2}

n = \frac{1.601.635}{1+1.601.635\times(0.05)^2} = 400

n = sample size
N = total number in population
e = the acceptable error is equal to (0.05)

The sampling method of the study formulated by Yamane (1967) consists of 414 healthcare workers with a simple, disproportionate sampling method. This study measured the influence of ethical leadership behavior on KM as a health sector in Turkey during pandemic period is scrutinized from the viewpoint of its workers (non-executive staff and managerial staff).

3.2 Data Collection

In this research, the influence of ethical leadership behavior on KM in Turkish healthcare sector during pandemic period is scrutinized. The questionnaire was sent to 414 healthcare professionals randomly selected from healthcare facilities operating in Turkey and conducted from 8 September 2021 to 17 November 2021. The questionnaire was understandable for all the healthcare professionals, because in this study we derived not only from Ethical Leadership Scale items but also from Knowledge Management Processes (KMP) Scale items. The literature was reviewed in detail with respect to content of each construct. Then the item pool was sent to the academicians from related fields. Based on the feedback received from the academicians, the survey form was adjusted and became ready for the pilot study. The questionnaire was prepared in English and translated into Turkish. Then the Turkish version was back-translated into English until the experts agreed that the two versions were almost identical. Then the survey was fine tuned to confirm the terms of the wording, format and sequence of the subscales and the items.

The survey conducted in the research is made up of three sections. The survey includes 55 questions and Likert Type Scale is applied to the questions in the sections except for the first one. All the response rates were 100%. Participation in online survey followed the principle of voluntariness to ensure the confidentiality and anonymity of respondents’ answers.

Ethical Leadership Scale (ELS), developed by Brown, Trevino and Harrison (2005), is a ten-item instrument used to measure perceptions of ethical leadership. It is listed as follows:

1. Listens to what employees have to say.
2. Disciplines employees who violate ethical standards.
3. conducts his/her personal life in an ethical manner.
4. Has the best interests of employees in mind.
5. Makes fair and balanced decisions.
6. Can be trusted.
7. Discusses business ethics or values with employees.
8. Sets an example of how to do things the right way in terms of ethics.
9. Defines success not just by results but also the way that they are obtained.
10. When making decisions, asks “what is the right thing to do?”. 

KMP Scale was taken from Delen et al. (2013). Original items in this scale were developed by Demirbağ et al. (2006). The original scale comprised of four factors is shown below.

Knowledge Creation and Development

1. Our corporate conducts enough number of R&D activities.
2. All employees of our corporate are encouraged continuous learning.
3. I have access to new and updated information on the Web.
4. Highly qualified and featured individuals are tried to be attracted to work in our corporate.
5. Our corporate supports innovative thinking and encourages creating innovative ideas.
6. Our corporate successfully implements a suggestion system.
7. Brainstorming sessions are conducted for creating alternative solutions to problems and for system development (i.e. improving the current service and production systems)
8. Employees of our corporate actively contribute to the process of knowledge creation.
9. Our corporate is systematically devoted to create and develop knowledge.

**Knowledge Codification and Storage**
1. All information about my job is regularly classified, filed, and stored in an electronic environment.
2. I can quickly and easily obtain the information that I need.
3. We have an effective record-storing system in which the related information about the employees and patients.
4. We have data storage and archiving system through which we can get rapid access to accurate information.
5. All personnel of our corporate record the data and the information which is revealed by their operations.
6. Information about services, employees, and patients is updated on a regular basis.
7. Our duties and operations are well-identified and recorded.
8. All technological information and inventions related to health all over the world are up to date and saved.

**Knowledge Sharing**
1. We pay special attention to share the accumulated knowledge with our colleagues.
2. We improve our work processes by sharing our knowledge and experience with our colleagues.
3. We efficiently make use of e-mailing and the Internet to share knowledge.
4. We efficiently make use of EBYS (Electronic Document Management System).
5. Teamwork is very helpful in sharing knowledge.
6. We conduct meetings with the other departments to coordinate knowledge-sharing.
7. To achieve informal knowledge-sharing, we organize picnics, soccer games, and family visits with our friends and try to get together apart from the work environment.
8. There is strong communication between the employees and the managers.

**Knowledge Utilization**
1. I effectively make use of my knowledge and experience in the work environment.
2. Our decision-making processes are working efficiently.
3. Our corporate effectively makes use of its knowledge potential.
4. Our corporate has a management style which is convenient to practically make use of accumulated knowledge.
5. The knowledge obtained through training is implemented in a short while.
6. Corporate knowledge is reflected in our health service systems.
7. Corporate knowledge is reflected in patients’ relationship processes.
8. Our corporate has adopted the philosophy of “continuous learning” and practicing the lessons learned.

### 3.3 Data Analysis
The research model was applied to determine the effect of ethical leadership on KM. In this study, ethical leadership was performed as the dependent variable and KM processes as the independent variables for the testing of hypotheses. In order to address the hypotheses stated above, demographic analysis, reliability analysis, correlation analysis and regression analysis were performed.
3.3.1 Demographic Analysis

Table (1) shows the gender, marital status, age, organization, years of experience, position, graduation degree and extra income of the respondents.

Table 1: Demographical Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>204</td>
<td>49.3</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>205</td>
<td>49.5</td>
</tr>
<tr>
<td></td>
<td>Agender</td>
<td>5</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>414</td>
<td>100.0</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Single</td>
<td>155</td>
<td>37.4</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>259</td>
<td>62.6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>414</td>
<td>100.0</td>
</tr>
<tr>
<td>Age</td>
<td>Less than 30 Years</td>
<td>164</td>
<td>39.6</td>
</tr>
<tr>
<td></td>
<td>31-39 Years</td>
<td>109</td>
<td>26.3</td>
</tr>
<tr>
<td></td>
<td>40-49 Years</td>
<td>120</td>
<td>29.0</td>
</tr>
<tr>
<td></td>
<td>50+ Years</td>
<td>21</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>414</td>
<td>100.0</td>
</tr>
<tr>
<td>Organisation</td>
<td>State-oriented</td>
<td>261</td>
<td>63.0</td>
</tr>
<tr>
<td></td>
<td>Private/Other</td>
<td>153</td>
<td>37.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>414</td>
<td>100.0</td>
</tr>
<tr>
<td>Years of work Experience</td>
<td>5 years</td>
<td>203</td>
<td>49.0</td>
</tr>
<tr>
<td></td>
<td>6-9 Years</td>
<td>53</td>
<td>12.8</td>
</tr>
</tbody>
</table>
The result presents that 49.5% of healthcare professionals were female, 49.3% were male and 1.2% were agender. Similarly, the total number of married respondents was 62.6%, while single respondents accounted for 37.4%. The sample is made of relatively young, 65.9% of who are under the age of 40. About 63% of respondents were working in state-healthcare facilities, while 37.0% of them were working in private or other healthcare facilities. About 49% of respondents have worked for their current healthcare facilities for 5 years or less, while 41% of respondents have spent over 5 years for them. While the total number of non-executive staff respondents were 92.8%, the other was 7.8%. The healthcare professionals’ graduation degree are also presented, the highest rate of the respondents (46.6%), were those with the qualification of bachelor. However, the rest of the other groups, Secondary Education, High School, Associate Degree, Master’s Degree and PhD., were only (0.7%), (11.4%), (27.1%), (10.4%), (3.9%) respectively. A great majority (88.2%) of the respondents had no extra income. This study was approved by Institute of Graduate Studies and Research, Cyprus International University and the healthcare professionals were informed of the processes and objectives driving the research.

### 3.3.2 Reliability Analysis

The Cronbach’s alpha reliability was checked prior to data collection using SPSS, the coefficient normally extends between 0 and 1, while there is no lower limit to the coefficient, the closer the Cronbach’s alpha coefficient is to 1.0, the greater the internal coherence of the items in the scale. Values above 0.8 are defined as good reliability (Hair, Ringle, Sarstedt, 2011). So the values of Cronbach’s alpha coefficient are statistically significant.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Processes</th>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
<th>Total Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethical Leadership</td>
<td>Ethical Leadership</td>
<td>.936</td>
<td>10</td>
<td>.936</td>
</tr>
<tr>
<td>Knowledge Management</td>
<td>Knowledge Creation and Development</td>
<td>.959</td>
<td>9</td>
<td>.931</td>
</tr>
</tbody>
</table>
In this study the Cronbach’s alpha coefficients, ethical leadership, knowledge creation and development, knowledge codification and storage, knowledge sharing and knowledge usage and utilizing were 0.959, 0.928, 0.886 and 0.951 respectively for the scale ratings.

3.3.3 Correlations Analysis
Table (3) presents the relationship between ethical leadership and knowledge creation and development, knowledge codification and storage, knowledge sharing, knowledge usage and utilizing processes of KM.

Table 3: Pearson Inter-Correlations between the variables

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Ethical Leadership</th>
<th>Knowledge Creation and Development</th>
<th>Knowledge Codification and Storage</th>
<th>Knowledge Sharing</th>
<th>Knowledge Usage and Utilizing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethical Leadership</td>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>414</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge Creation and Development</td>
<td>Pearson Correlation</td>
<td>.772**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>414</td>
<td>414</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge Codification and Storage</td>
<td>Pearson Correlation</td>
<td>.574**</td>
<td>.675**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>414</td>
<td>414</td>
<td>414</td>
<td></td>
</tr>
<tr>
<td>Knowledge Sharing</td>
<td>Pearson Correlation</td>
<td>.715**</td>
<td>.794**</td>
<td>.777**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>414</td>
<td>414</td>
<td>414</td>
<td>414</td>
</tr>
<tr>
<td>Knowledge Usage and Utilizing</td>
<td>Pearson Correlation</td>
<td>.775**</td>
<td>.842**</td>
<td>.743**</td>
<td>.859**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>414</td>
<td>414</td>
<td>414</td>
<td>414</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

It clarifies that there is a positive significant relationship between ethical leadership and knowledge creation and development as reflected by the 77.2%. The results show that there is a significant and positive relationship between ethical leadership and knowledge codification and storage as reflected by 57.4%. And it shows that
there is a positive relationship between ethical leadership and knowledge sharing as reflected in the 71.5%. It also shows that there is a positive relationship between ethical leadership and knowledge usage and utilizing as reflected in the 77.5%. The major finding of this test is: there is a significant correlation between independent and dependent variables.

3.3.4 Hypothesis Test
The regression results in terms of standardized regression coefficients (with significance levels), ANOVA test and tolerance values are presented in Table 4. The regression results in terms of standardized regression coefficients (with significance levels) and tolerance values are presented in Table 4.

Table 4: Regression Model

<table>
<thead>
<tr>
<th>Regression Model</th>
<th>Dependent Variable</th>
<th>Independent Variables</th>
<th>Significant Level in ANOVA</th>
<th>Adjusted R²</th>
<th>Standart Coefficient (Beta)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethical Leadership</td>
<td>Knowledge Creation and Development</td>
<td>0,000</td>
<td>0,672</td>
<td>0,435</td>
<td>0,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowledge Codification and Storage</td>
<td>-0,113</td>
<td>0,019</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowledge Sharing</td>
<td>0,093</td>
<td>0,148</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowledge Usage and Utilizing</td>
<td>0,348</td>
<td>0,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The representation ratio of the model is 67.2% (adjusted R²). The model was statistically significant. (ANOVA significance level was 0.00 p<0.01).

Table 4 shows both the direct and indirect effects of ethical leadership on employees’ knowledge creation and development, knowledge codification and storage and knowledge usage and utilizing behavior. First, ethical leadership has a significant and positive relationship with employees’ knowledge creation and development behavior (β = 0.435, p < .005) and knowledge usage and utilizing behavior (β = 0.348, p < .005). Second, ethical leadership has a significant and negative relationship with employees’ knowledge codification and storage behavior (β = -0.113, p < .005).

But, Table 4 also shows that the relationship between ethical leadership and knowledge sharing is insignificant (β = 0.093, p > .005).

Table 5: Hypothesis Test

<table>
<thead>
<tr>
<th>HYPOTHESES</th>
<th>Accepted/ Rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₁ Ethical leadership has an impact on knowledge creation and development.</td>
<td>Accepted.</td>
</tr>
<tr>
<td>H₂ Ethical leadership has an impact on knowledge codification and storage.</td>
<td>Accepted.</td>
</tr>
<tr>
<td>H₃ Ethical leadership has an impact on knowledge sharing.</td>
<td>Rejected.</td>
</tr>
<tr>
<td>H₄ Ethical leadership has an impact on knowledge usage and utilizing.</td>
<td>Accepted.</td>
</tr>
</tbody>
</table>

The significance levels of ethical leadership on employees’ knowledge creation and development, knowledge codification and storage and knowledge usage and utilizing were less than 0,05. Therefore, Hypothesis 1, 2 and 4 is accepted. But the significance level of ethical leadership on employees’ knowledge sharing was 0,148, which is more than 0, 05. Therefore, Hypothesis 3 is rejected.

4. Conclusion, Recommendations and Directions for Further Research

4.1 Conclusion
Although there are findings confirming the assumed relationship between ethical leadership and knowledge sharing in the theoretical and empirical discussions, this study has not found a relationship between ethical
leadership and knowledge sharing probably due to the hard workload on the healthcare workers during the pandemic period. It has been observed in the study that the COVID-19 pandemic not only affects human health and life, but also negatively affects the knowledge sharing of employees. Therefore, it is evaluated that different findings can be obtained in the studies to be carried out after the pandemic period.

This study is among the first to examine the effects of ethical leadership on employees' knowledge creation and development, knowledge codification and storage and knowledge usage and utilizing behavior at healthcare sector. The results of this study indicate that ethical leadership is a critical and highly effective tool for enhancing creativity and increasing efficiency of KM. Providing the employees with appropriate Internet access and library facilities allows them to fulfill their academic requirements; it also provides appropriate skills and knowledge. This also encourages their job participation and enables them to use their initiative to make the right decisions. Overall, it gives employees the freedom and confidence to perform their job in their own way without direct intervention, while also strengthening, promoting, or training them to support the infrastructure of the organization. It provides technical resources and promotes independence, responsibility, and self-focuses on workers in the organization, and the formation of trust between the leadership and employees, which leads to empowering employees. Furthermore, it can reduce absenteeism and turnover work, enabling employees to achieve a privileged position, increase competitiveness, increase cooperation in solving problems, giving them a high innovative capacity and high individual resistance to the pressures of work. Finally, the analysis process has proven the significant role of ethical leadership in enhancing KM.

4.2 Recommendation
The ethical status and behavior of managers in the managerial process is of critical importance for the performance of organizations. Therefore, managers, who have acquired ethical leadership, can contribute to the achievement of the goals of their organizations by bringing a different dimension to the attitudes of employees through well-managed KM processes.

Health organizations should work to support continuous learning of their employees also after the pandemic period, expand backgrounds, and explore approaches to coordinate knowledge and past encounters with new learning. In order to educate them more about the practice of organizational creativity and the dissemination of knowledge, holding internal dialogues between all working groups will be good for the organization’s overall success. Health institutions and their managers must have the skills to solve problems in creative ways.

In order to have a positive and meaningful relationship between ethical leadership and KM, healthcare managers who have ethical leadership can organize weekly or monthly meetings where employees will freely express their ideas and opinions, exchange mutual ideas, and reward employees who contribute to the development of the organization. Health managers will contribute to the in-house bonding of managers and employees and strengthening corporate belonging by organizing activities such as matches, picnics, sightseeing tours, dance and folk dances.

4.3 Directions for Further Research
Although the study tested the impact of ethical leadership style on KM during the COVID-19 pandemic in the healthcare industry, the future studies could be designed by adding some variables into the model apart from the KM processes like employee loyalty, employee durability, job satisfaction, organizational citizenship behavior, organizational changing processes and resistance to change, and etc. at the same sector.

The new study, which could be designed from the result of this study, can be done after the COVID-19 process whether there could be the different results between the COVID-19 process and after the COVID-19 pandemic period. So, whether there could be the difference during and after the pandemic or not, the results would be very interesting to understand the flow of knowledge. Additionally, the effects of ethical leadership on knowledge creation and development, knowledge codification and storage, knowledge sharing and knowledge usage and utilizing conducted in this study will contribute to the literature in different institutions and after the pandemic period in future research.

References