

Conflict Coping by Second-Level Physicians: Thomas-Kilmann Instrument

Afrontamiento de conflictos por médicos de segundo nivel: instrumento Thomas-Kilmann

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ABSTRACT

Objective: To identify conflict coping styles in doctors from a second level hospital and the association and the academic degree association.

Material and Methods: Observational, analytical, prospective, cross-sectional study with the application of the Thomas-Kilmann instrument in a second level hospital. The variables were age, sex, academic level, style of resolving conflicts and seniority. Descriptive statistics were used with frequencies and percentages, and inferential analysis with Pearson's χ^2 considering a value of $p \leq 0,05$. **Results:** 63 of 200 physicians were surveyed, 36 women (31.5%), ages 21 to 67 years, mean 44; 24 general practitioners (37.5%) and 39 specialists (60.9%). Work experience from 1 to 40 years, average 12. Styles for managing conflicts: commitment 41 (32.5%), collaborator 38 (30.1%), evasive 25 (19.9%), competitive 11 (8.75%) and accommodating 11 (8.75%). When performing the inferential analysis with Pearson's χ^2 between conflict management style and physicians with and without specialty, the value of p was 0.1303; between gender, $p = 0.629$, and ages ≤ 39 years and ≥ 40 years, $p = 0.578$, without finding a significant difference. **Conclusions:** Physicians showed a predominance of commitment to face conflicts, followed by collaborator, evasive, competitive, and accommodating, with no association between gender, age, academic degree, or seniority.

Keywords

medical conflict; labor mediation; medical profession; health; hospital doctors.

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RESUMEN

Objetivo: Identificar los estilos de afrontamiento de conflictos en médicos de un hospital de segundo nivel y la asociación con su grado académico.

Material y métodos: Estudio observacional, analítico, prospectivo, transversal con la aplicación del instrumento Thomas-Kilmann en un hospital de segundo nivel. Las variables fueron edad, sexo, nivel académico, estilo de resolver conflictos y antigüedad laboral. Se utilizó estadística descriptiva con frecuencias y porcentajes, y análisis inferencial con χ^2 de Pearson considerando un valor de $p \leq 0,05$. **Resultados:** Se encuestaron a 63 de 200 médicos, 36 mujeres (31,5%), edades de 21 a 67 años, con una media de 44 años; 24 médicos generales (37,5%) y 39

especialistas (60,9%). Con una antigüedad laboral de 1 a 40 años, con una media de 12 años. Los estilos encontrados para gestionar conflictos fueron: compromiso (41; 32,5%), colaborador (38; 30,1%), evasivo (25; 19,9%), competitivo (11; 8,75%) y complaciente (11; 8,75%). Al realizar el análisis inferencial con χ^2 de Pearson entre estilo de manejo de conflictos y médicos con especialidad y sin especialidad, el valor de p fue 0,1303; entre el sexo, $p = 0,629$, y entre edades en ≤ 39 años y ≥ 40 años, $p = 0,578$, sin encontrar diferencias significativas. **Conclusiones:** Los médicos mostraron predominio del estilo comprometido para afrontar conflictos, seguido del colaborador, evasivo, competitivo y complaciente, sin asociación entre género, edad, grado académico ni antigüedad.

Palabras clave

conflicto médico; profesión médica; resolución de conflicto; salud; médicos hospitalarios.

Introduction

The research arose from the need to understand the conflictive reality of the hospital in question, in which relational situations are evidenced by manifestations of undesirable behavior among fellow physicians, possibly as a result of the failure to resolve internal disputes.

The Health Sciences Descriptors define labor conflicts as opposing or competitive actions between incompatible parties (1). Meanwhile, the Royal Spanish Academy (2) defines them as follows: combat, struggle, fight, armed confrontation, trouble, unfortunate situation with a difficult way out, problem, issue, matter of discussion. It even penetrates the field of psychology and mentions that this word corresponds to the coexistence of contradictory tendencies in the individual, capable of generating anguish and neurotic disorders.

Conflict theory has been consolidated with contributions from scholars from all countries and various disciplines, such as sociology, economics, philosophy, and politics, as well as psychology, which has been part of modern sociological thought since the 1950s and links conflict theory to game theory and negotiation approaches (3).

Morality and the behavior of socialized individuals always function as biological entities in the dynamics of the social structure, attempting to maintain internal equilibrium with

all of their constituent parts through processes and mechanisms schematized in standardized norms for the society that will be renewed on demand (4).

Conflict is still a vast field in which an increasing number of researchers from different disciplines are joining and converging in conflictology to organize the theoretical thinking of the subject and provide the necessary knowledge to know the genesis, development, analysis, approach, and resolution with dissimilar methods, emerging and lacking in adversity (5).

Conflict, by itself, is neither good nor bad. This connotation will depend on how it is managed since it is an event that simply occurs due to differences of opinion or interests and cannot be assessed by a previously formed judgment (6). That is to say, it can lead us to the extreme of belligerence such as war, or personal growth. Personal growth is focused on conflict mediation, transforming it, carrying out joint work between the parties, and empowering them to solve it as a team. Added to the solution, a modification in their paradigms is obtained, with which social education is also carried out (7). It is generally accepted that conflicts are inevitable and must be resolved to avoid negative impacts on the individual or organization.

In both the 1960s and 1970s, Kilmann and Thomas' instrument described conflict behaviors using two dimensions: assertiveness and cooperation. The former is used by the individual to satisfy his or her own needs. Cooperation is used to resolve the concerns of others (8). Within these dimensions, five modes of conflict management were described, which paralleled those of Blake and Mouton: competing, accommodating or yielding, avoiding, collaborating, and compromising (9).

The collaborative style consists of assertively proposing solutions to the conflict that benefit all parties. The competitive mode is very assertive and non-cooperative; here one seeks to satisfy one's own interests, does not feed on the counterpart, and is useful when defending inalienable rights. In the commitment, measures are formulated based on which the parties involved are obliged to fulfill a part of the deal.

This model is equidistant from the other four models. The accommodating form is when one of the parties in conflict privileges the interests of its counterpart and yields to its own. The evasive is a style that does not provide solutions, avoids participation, and does not interact with its opposite (1).

In the management of labor disputes, it is necessary to promote consensus-based initiatives that provide conciliation or mediation services so that these differences do not escalate into larger conflicts. When there is a conflictive work environment, relationships at work become stress generators that affect the psychosocial environment of the worker and alter the productivity, effectiveness, and efficiency of the organization (10).

Based on the above, physicians at the second level of care were evaluated using the Thomas-Kilmann Instrument to determine the correlations between the five conflict management styles and the two dimensions of assertiveness and cooperation in our center. The values were acceptable in terms of psychometric properties. In addition, reliability was determined by the internal consistency method (Cronbach's $\alpha = 0.89$).

The Thomas-Kilmann Conflict Management Style Assessment Instrument has been validated among healthcare personnel, nurses, residents, board-certified physicians, hospital administrators, and program directors, although not specifically among specialist and non-specialist physicians (9).

In research in Israel, Hendel et al. (11) sought to identify and compare the conflict management options of physicians and nurse managers using the Thomas-Kilmann Instrument and found that the compromised mode was the most common, with no differences found between physicians and nurses. In a multicenter study in Malaysian medical interns, Roslan et al. (12) found a high prevalence of burnout and a relationship with certain characteristics, such as low resilience and avoidant coping with *burnout*. A study by Raykova et al. (13), in Bulgaria, using the same instrument, found the engaged mode, followed by

avoidant and competitive coping, to be the most common.

Identifying individual conflict management styles can help provide insight into second-level physicians' strengths and potential weaknesses in dealing with conflict, which can ultimately help them become better leaders in the department.

Material and methods

This was an observational, analytical, prospective, and cross-sectional study, in which the Thomas-Kilmann Instrument was applied in a second-level hospital, after authorization by the hospital Ethics Committee, consent by the participants, and anonymously by those who wished to participate freely and voluntarily.

The survey was applied physically on a sheet of paper, where the variables of age, sex, seniority, and academic degree were included. Also, the survey variables such as conflict coping styles were included. A total of 63 physicians were included out of a census of 200 from a second-level hospital who were selected non-randomly from those who wished to fill out the instrument.

Statistical analysis

Descriptive statistics were used with averages, medians, and proportions, as well as inferential analysis with Pearson's χ^2 test, with a value of $p = 0.05$ being considered statistically significant. Figures and tables were used for interpretation. An Excel® database was used, where the variables were coded. Subsequently, they were transferred to the SPSS statistical program, version 24 for Windows.

Results

When normality was assessed with the Kolmogorov-Smirnov test for the sample, all variables were found to have a normal distribution with a $p \leq 0.000$ ($p = 0.05$; 95% CI). The sample was obtained in a non-probabilistic manner from a total of 200 physicians working

in the hospital, who voluntarily decided to participate, and there were 63, which represented 31.5%. The mean age was 42.06 years (range 21 to 67) with a standard deviation 12.782. There were 36 female representatives (57%) and 27 male representatives (43%) (Figure 1).



Figure 1
Gender in 63 physicians who responded to the Thomas Kilmann Instrument to assess conflict management styles

Non-specialist physicians numbered 24 (38%) and specialist physicians numbered 39 (62%), as shown in Figure 2.



Figure 2
Academic grade in 63 physicians who answered the Thomas Kilmann Instrument to assess conflict management styles

Regarding the conflict coping style, we found the committed (41; 32.5%), collaborative (38; 30.1%), avoidant (25; 19.9%), competitive (11; 8.75%), and the same number for the compliant style, which is to give in or accommodate to the situation (11; 8.75%), displayed in Figure 3.

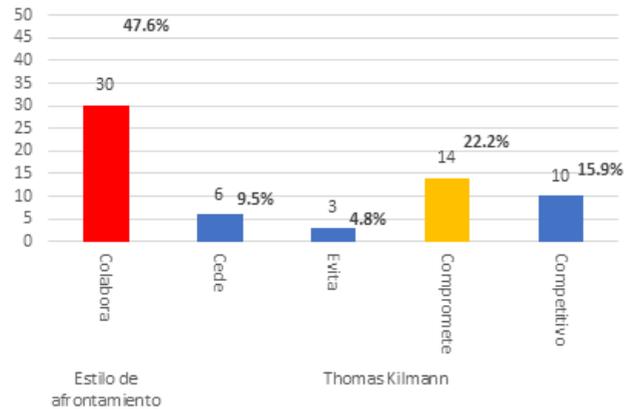


Figure 3
Coping style according to the Thomas Kilmann Instrument in 63 physicians

When performing inferential analysis with Pearson's χ^2 between physicians with a specialty and without a specialty, as well as their conflict management style, there was no significant difference ($p = 0.1303$). Similarly, this test was used to see if there was an association between either sex or conflict management style, with no difference found ($p = 0.629$). Ages were dichotomized into ≤ 39 years and ≥ 40 years to evaluate whether there was a difference between these two age groups and styles, with no differences found ($p = 0.578$). See Table 1

Table 1
Association between variables and conflict management style

Variables	p-value
Physicians with and without specialty	0.1303
Female and male sex	0.629
Ages ≤ 39 years and ≥ 40 years.	0.578

Discussion

The mean age in this series was similar to that reported by Raykova et al. (13), with a mean of 44.3 (± 0.62). The female gender was older than

the male, similar to that described by Raykova et al. (13). Regarding gender, Sportsman and Hamilton (14) found that there was no difference in conflict coping style between men and women, similar to what was found in this series. The same Raykova et al. (13) reported a predominance of the engaging style, followed by avoidance in a group of nursing students, which coincides with the present series in which the second position is occupied by the collaborative style, similar to that described by Hendel et al. (11), where the engaging style was the most common.

A study was carried out in a group of healthcare professionals in the intensive care unit and the following order of frequency was obtained: avoid (32%), compromise (30%), please (25%), collaborate (9%), and compete (5%). Also different from that described by Sportsman and Hamilton (14). Raykova et al. (13) described that physicians are more prone to the collaborative style; they found this in a series of 302 specialist physicians in a hospital in Bulgaria, which is different from what was found in this sample.

As in the present study, in the series of Sportsman and Hamilton (14), there was no relationship between conflict management style and academic level. Researchers from the University of Plovdiv in Bulgaria determined the conflict management styles of 302 physicians from 3 different hospitals. The sample of 223 (73.8 ± 2.53%) specialists and 79 (26.2 ± 2.53%) non-specialist physicians showed similarities with the present work, as the predominant conflict resolution style was also compromise, followed by avoidance, collaboration, accommodation, or complacency and competition. (14). Hendel et al. (11) found no association between gender, which is similar to our study. Nor did they associate any style of conflict resolution with the professions of nursing and medicine, similar to our study, but between general practitioners and specialists.

Few publications address this aspect of medical practice, and this represents an area of opportunity for research to help us understand, in the first instance, problem-solving styles and, subsequently, to carry out research at an applied

level to improve these situations, which are so commonplace but little taken into account.

The limitations of this work imply a reduced sample since out of a census of 200 physicians, we only had participation of 31.5%, which limits the generalization of our results. We consider it necessary to seek greater dissemination and awareness among health professionals of the great advantages of understanding conflict coping styles, to seek strategies that facilitate the understanding of this situation, which is so common in our hospital practice.

Conclusion

The most common conflict coping style in hospital physicians at the second level of care is that of compromise. There were no differences between genders, between ages ≤ 39 years and ≥ 40 years, by academic degree, or in the length of service of the respondents.

The medical population of this second level of care unit was equidistant from cooperation and assertiveness, which is interpreted as an absence of trust and doubts among peers. This explains the frequent emergence of conflicts, as well as the predominant style in their management, compromise. Here physicians only respond toward resolution, compromising or conceding only if their counterpart acts in the same way.

Collaboration implies joint cooperation to achieve a common goal for the benefit of all those involved, which is very relevant in the area of medicine, where specialists from different areas come together to restore a person's health. This style also involves assertiveness in communication and actions towards peers, patients, and, in general, the people with whom they work. The absence of collaboration stimulates conflict and hinders its resolution.

Conflict of interest

There is no conflict of interest.

References

1. Abarca Arias YM, Espinoza Moreno TM, Llerenan Callata SG, Berrios Manrique NY. Labor conflicts types and their management in nursing practice. *Enferm Glob*. 2020;19(1):470-8.
2. Ortiz V, Álvaro C. Organización de la producción y del trabajo. *Ind Prod Trab*. 2003;24(2):40-8.
3. Silva García G. La teoría sociológica del conflicto: un marco teórico necesario. *Prolegómenos*. 2008;11(22):29-43.
4. Lockwood D. Some remarks on "the social system". *Br J Sociol*. 1956;7(2):134.
5. Redorta J. Gestión de conflictos: lo que necesita saber. *J Chem Inf Model*. 2017;53(9).
6. Luna Bernal ACA, Valencia Aguirre AC, Nava Preciado JM. Propiedades psicométricas del Inventario de Rahim en una muestra de adolescentes estudiantes de bachillerato. *Rev Evaluar*. 2018;18(2):75-90. <https://doi.org/10.35670/1667-4545.v18.n2.20810>
7. De Armas Hernández M. Mediation in conflict resolution. *Educar*. 2003;32:125.
8. Kilmann T. Thomas Kilmann: actividad estilos de conflicto de Thomas Kilmann. *Consult Psychol Press*. 1974;1-12.
9. Ogunyemi D, Fong S, Elmore G, Korwin D, Azziz R. The associations between residents' behavior and the Thomas-Kilmann conflict MODE instrument. *J Grad Med Educ*. 2010;2(1):118-25. <https://doi.org/10.4300/JGME-D-09-00048.1>
10. Benítez M, Medina FJ, Munduate L. El estudio del conflicto en los equipos de trabajo. Una visión de las contribuciones científicas realizadas en España [Internet]. *Papel Psicol*. 2011;32:69-81. Available from: <https://www.redalyc.org/articulo.oa?id=77817210008>
11. Hendel T, Fish M, Berger O. Nurse/physician conflict management mode choices: Implications for improved collaborative practice. *Nurs Adm Q*. 2007;31(3):244-53. <https://doi.org/10.1097/01.NAQ.0000278938.57115.75>
12. Roslan NS, Yusoff MSB, Razak AA, Morgan K, Shauki NIA, Kukreja A, et al. Training characteristics, personal factors and coping strategies associated with burnout in junior doctors: a multi-center study. *Healthc*. 2021;9(9). <https://doi.org/10.3390/healthcare9091208>
13. Raykova E, Semerdjieva M, Tornoyova B. Conflict management style in the work of medical specialists in hospitals. *J IMABe* 2020;26(2):3068-72. <https://doi.org/10.5272/jimab.2020262.3068>
14. Sportsman S, Hamilton P. Conflict management styles in the health professions. *J Prof Nurs*. 2007;23(3):157-66. <https://doi.org/10.1016/j.profnurs.2007.01.010>