

Knowledge Management in Social Organizations During a Humanitarian Crisis

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Abstract: This paper presents an overview of issues related to the role of knowledge management in social organizations. Chosen aspects of knowledge management theory in voluntary not-for-profit groups, operating during a humanitarian crisis, are here addressed. The paper aims to demonstrate the determinants of knowledge management, using as an example, events at the Poland/Ukraine border - in the period 2022-2023. The additional aim is to show how to identify common processes underlying knowledge management, and how it was acquired, managed and transferred, in disparate organizations. The authors of this paper took part in the humanitarian action in the first few weeks of the conflict - both independently and in co-operation with non-governmental organizations. This allowed for the collection of extensive material during the first stage of the research, and creation of a database of NGO's, used for the second stage of the research. During preparations for the survey a hypothesis was established: When sudden emergencies arise, a variety of information and knowledge is collected, dispersed, widely shared, and belongs to many different organizations. Therefore, a coherent information system is needed for the dissemination and sharing of knowledge for effective assistance to people affected by the crisis. The methodology of participatory observation and surveys was used for the research. It was found that knowledge was transferred in and out of the organizations, and expertise from earlier experiences was also applied and transferred, thus becoming explicit. Managerial skills and methods were applied in new organizational contexts. Knowledge acquisition, transfer and sharing were clearly identifiable across in a wide spectrum of research, as was organizational learning and the subsequent usage of it. Knowledge management in a crisis situation encompasses all activities aimed at improving preparatory and executive actions. One of the key elements of knowledge management, which determines its success, is effective acquisition, information handling and delivery to the relevant organizations involved. This is essential for the response of individual organisations, whether at the level of local government or national non-profit organizations.

Keywords: Knowledge Management, Humanitarian Crisis, NGO Organizations

1. Introduction

Effective Knowledge Management (KM) serves as a vital instrument for organizations, enabling them to preserve, cultivate, structure, and utilize accumulated knowledge efficiently. Scholars and practitioners alike recognize the potential and significance of knowledge management for organizational success, as underscored by Karamat (2018). Essentially within the dynamic landscape of social organizations in Poland, which boasts substantial knowledge reservoirs, it is imperative that good knowledge management becomes even more essential. Various strategies must exist for the formal recording, transfer, and utilization of knowledge within social organizations.

Non-governmental organizations (NGOs) assume a significant role in ameliorating the adverse ramifications of humanitarian crises. By operating in close proximity to affected populations and directly engaging with the environment, NGOs are adept at accurately identifying emergent issues. Moreover, they often possess more suitable means and methodologies to address the challenges at hand-compared to other entities. Based on independent decisions, NGOs exhibit a heightened awareness of crisis situations, enabling them to operate swiftly and effectively, to reach affected individuals. This results in a more efficient mitigation of the crisis's detrimental effects on individual stakeholders and enhances societal protection.

Non-governmental organizations exhibit a varied approach to crisis situations, potentially fostering mutual trust and nurturing interpersonal relationships during challenging times (Egger and Schopper, 2022).

Haaland and Wallevik (2019) underscore the crucial role of citizens in executing aid activities, asserting that in extensive humanitarian crises involving a substantial number of individuals in distress, the efforts of governmental and non-governmental organizations alone may prove insufficient. Rabiei et al. (2023) similarly highlight the significance of "spontaneous volunteers" in crisis situations, identifying the primary challenge as the effective allocation of volunteers during disasters. Taouktsis and Zikopoulos (2024) emphasize the organizational aspect of knowledge management in crisis situations, proposing enhancements in humanitarian logistics. Mena and Hilhorst (2022) isolate a critical facet of crisis management, noting the shift from development and disaster reduction to humanitarian aid.

Despite an extensive body of literature on knowledge management during crises in developed nations, there remains a notable dearth of research on KM implementation amid humanitarian crises, especially within the Polish context. In the wake of the humanitarian crisis on the Polish-Ukrainian border, Poland found itself in the nascent stages of crafting a knowledge management strategy, encountering numerous challenges, barriers, and deficiencies in the implementation process. This study aims to identify and analyse the factors influencing the efficacy of knowledge management, as well as the obstacles and gaps hindering its successful implementation.

2. The Role of Social Organizations in Managing Humanitarian Crises

As per the Organization for Economic Co-operation and Development (OECD) definition, social organizations are institutions dedicated to activities benefiting the community or public interest, with their primary aim being to foster social or public welfare rather than private financial gain (Lettieri et al., 2004). These entities can manifest in various forms, including non-profit organizations, non-governmental organizations (NGOs), foundations, associations, and other entities dedicated to social good. This sector is characterized by its diversity, encompassing a broad spectrum of endeavours ranging from charitable works to social and educational initiatives. Moreover, social organizations frequently engage in humanitarian efforts, addressing crises and needs within both local and global communities.

In academic literature, the term "Non-Governmental Organization" (NGO) is commonly used internationally as a synonym for social organizations. Additionally, terms such as "non-profit organizations" or "public service organizations" are employed interchangeably to describe these entities. These varying designations underscore the overarching principle that the endeavours of social organizations should be oriented towards addressing diverse social needs at a public level, transcending the individual interests of founders, board members, or organization constituents themselves (Supra-Markowska, 2015).

Within the realm of humanitarian crises, social organizations play a pivotal role in extending aid to affected populations, safeguarding civilian well-being, orchestrating relief efforts, conducting educational initiatives, and bolstering local communities. Additionally, they undertake measures to address the root causes of crises (OECD, 2024). Through their active involvement, the alleviation of suffering among crisis-affected individuals becomes feasible, facilitating their rehabilitation and recovery in the aftermath of disasters or other humanitarian emergencies (Singh, 2023).

As per the OECD's (2019) delineation, humanitarian organizations are entities dedicated to providing assistance in crisis scenarios, encompassing natural calamities, armed conflicts, poverty, and other exceptional circumstances posing threats to individual or community life, health, or safety. These organizations are committed to both pre-emptive measures and crisis response. A cornerstone of their endeavours lies in advocating for human rights, humanitarian principles, and universal values.

Humanitarian organizations operate across a spectrum of scales, ranging from the international level (e.g., the Red Cross, Red Crescent, UNICEF) to the local, regional, and national levels. Within Poland, prominent humanitarian entities include the Polish Red Cross (PCK), Caritas Poland, Polish Humanitarian Action (PAH), The "Ocalenie" Foundation, and similar organizations. These entities frequently collaborate among themselves and with governmental bodies, UN agencies, and local communities to deliver impactful humanitarian aid to those facing the most acute vulnerabilities. Such collaborative efforts not only enhance the efficacy of assistance but also foster the development of innovative solutions (Williams, 2012, pp. 550-560).

3. The Contribution of Polish Social Organizations in Delivering Aid Amidst the Humanitarian Crisis on the Polish-Ukrainian Border

Polish humanitarian organizations have played a crucial role in providing aid during various crises along the Polish-Ukrainian border (Stępień-Zafucka & Uliasz, 2023). The armed conflict in Ukraine, initiated in February 2014, stemmed from preceding events, including the Maidan Revolution in Kiev in November 2013 and the ousting of President Viktor Yanukovich in February 2014. The direct catalyst for the conflict was Russia's annexation of Crimea in March 2014 and escalating tensions in eastern Ukraine, particularly in the Donetsk and Luhansk oblasts, where separatist movements emerged, advocating for independence from Kiev. This conflict evolved into an open armed confrontation between Ukrainian forces and pro-Russian separatists, backed by Russia. Subsequently, ongoing hostilities in eastern Ukraine have resulted in tragic consequences for civilians and have contributed to regional destabilization (United Nations, 2022; Freedman, 2023).

Throughout the Ukrainian crises, Poland emerged as a pivotal contributor to humanitarian assistance, driven by several key factors. Firstly, its geographical situation next to Ukraine, positions Poland as a natural ally in extending humanitarian aid during crisis scenarios. Proximity facilitates the logistical organization and transportation of aid to affected regions. Secondly, Poland boasts considerable expertise in humanitarian endeavours, both domestically and internationally. Leveraging this expertise, Polish humanitarian organizations and the governmental Agency for Technical and Programmatic Assistance (Polish Aid, 2024) possess the requisite knowledge and resources to orchestrate humanitarian initiatives effectively. Thirdly, Poland and Ukraine share a profound historical bond, marked by intertwined destinies and enduring relations. Despite historical challenges, a profound sense of solidarity prevails between the two nations, with Poland exhibiting particular empathy and support towards Ukraine during crises and hardships. Provision of humanitarian aid serves as a tangible manifestation of this solidarity and compassion. Lastly, Poland actively champions Ukraine's political, economic, and social transformation efforts. Humanitarian aid stands as a vital component of this multifaceted collaboration, aimed at bolstering democracy, rule of law, and stability within Ukraine (Stępień-Załucka & Uliasz, 2023).

According to Office of the United Nations High Commissioner for Human Rights (OHCHR), Poland assumes a pivotal role in delivering humanitarian aid, offering crucial support to the Ukrainian populace during times of adversity and aiding in alleviating the repercussions of humanitarian crises in the region (OHCHR, 2022). Below are excerpts from sources discussing initiatives undertaken by Polish humanitarian organizations.

Following Russia's annexation of Crimea in 2014, numerous individuals from Crimea were compelled to flee their homes and seek refuge in Poland. In response to this exigency, humanitarian organizations extended material aid, psychological counselling, and assistance in job placement and acclimatization to new living conditions (Patel and Erickson, 2022). During the period of 2014-2015, amid the armed conflict in Eastern Ukraine, thousands sought sanctuary in Poland. Polish humanitarian entities provided vital support to refugees, furnishing them with shelter, sustenance, clothing, medical attention, and psychological counselling (Asmussen, 2014).

Since the onset of 2022 and the escalation of the armed conflict, Polish humanitarian organizations have consistently offered aid to migrants and individuals in distress along the Polish-Ukrainian border. This aid again includes provision of sustenance, clothing, hygiene essentials, medical care, and psychological assistance to individuals navigating challenging circumstances while crossing the border. Additionally, aid includes facilitating transportation to accommodation sites and furnishing comprehensive support in the refugees' newfound places of residence (Patel & Erickson, 2022).

4. Knowledge Management Practices Within Social Organizations

Knowledge serves as vital intellectual capital, underpinning the growth of both individuals and organizations. It plays a structural role, providing a cohesive framework for data and information processing (Zins, 2007), thereby facilitating the derivation of meaning and deeper comprehension. Furthermore, knowledge transcends mere factual contexts, evolving into a wellspring of wisdom through synthesis and reflection upon accumulated content.

In terms of fundamental classification, knowledge can be delineated into two primary categories: explicit and tacit (Smith, 2001; Collins, 2019). Explicit knowledge, being overt and tangible, is readily articulated through defined concepts, figures, or facts. However, it represents only the visible portion of the knowledge reservoir, akin to the tip of an iceberg. Conversely, tacit knowledge, constituting the majority of our knowledge base, proves elusive to capture and express. As observed by Michael Polanyi, we may possess knowledge that eludes clear articulation (Polanyi, 2009).

Another important categorization of knowledge extends to include implicit knowledge (Ahmed et al., 2002). While tacit and implicit knowledge are often used interchangeably, it's important to distinguish that tacit knowledge refers to the type of knowledge an individual may possess without realizing it. This knowledge is typically acquired through experience and practice and may not always be consciously expressed (Chmielewska-Banaszak, 2010). Alternatively, a slightly different perspective on tacit knowledge (Sternberg et al., 2000.) defines it as knowledge that is not directly expressed and is acquired through individual human experience. Tacit knowledge exhibits three distinct characteristics: 1) It is autonomously acquired by the individual; 2) It is primarily procedural in nature, based on skills and methods of conduct; 3) It is directly applicable in practice, meaning it is relevant to specific operational contexts.

This approach underscores the specialized nature of tacit knowledge, which is intricately linked to specific contexts, encompassing effective action methods within particular situations. The context for such knowledge may encompass both an individual's personal experiences and the professional environment in which they operate. Moreover, rich tacit knowledge serves as a springboard for various combinations of established procedures, facilitating its flexible adaptation to new circumstances. This entails the creative utilization of developed patterns and procedures acquired during the knowledge acquisition process, alongside integration of new information (Wąsowska, 2018).

In social organizations, knowledge management endeavours are geared towards fostering continuous learning, enhancing human resource development, and cultivating intellectual capital, to effectively carry out community-oriented initiatives and fulfil organizational missions (Siawsh et al., 2023). As outlined by the Organization for Economic Co-operation and Development (OECD, 2019), knowledge management in social organizations encompasses processes, strategies, and practices aimed at adeptly gathering, utilizing, and disseminating knowledge to advance organizational objectives and cater to the needs of members and stakeholders. This entails the identification, creation, collection, storage, analysis, sharing, and application of knowledge to enhance decision-making, foster innovation, streamline processes, and attain organizational excellence.

The cornerstone of successful knowledge management lies in the seamless collaboration among three sectors: public organizations, non-governmental organizations, and businesses. This management approach hinges on the harnessing of intangible assets, primarily knowledge and human capital (Hislop et al., 2018), complemented by modern information technologies (Karamitri et al., 2020). Possessing human intellectual capital and knowledge spanning not only organizational management but also the latest advancements in technology and contemporary science, is pivotal component of effective knowledge management. Da Silva Avanzi, et al. (2017) propose Disaster Response Management System, supporting aspects of knowledge management such as: knowledge acquisition, organisation and assessment.

Thus, as outlined above, in humanitarian organizations, effective knowledge management serves as a linchpin for enhancing operational efficacy, facilitating information exchange (McGill et al., 2023), mitigating redundancies, and fostering continual improvement. Consequently, this enables more adept crisis response and the provision of efficient humanitarian assistance.

5. Selected Aspects of Knowledge Management During Humanitarian Crises: Insights From Research

The study focused on representatives of charitable organizations engaged in aiding refugees during the humanitarian crisis on the PL/UA border, specifically during the initial weeks of the armed conflict in Ukraine and immediately thereafter. Two distinct phases of the crisis were identified for research purposes: the initial phase, characterized by assistance provision at border reception sites for individual refugees, and the subsequent phase involving aid delivery to refugees at their places of residence in Poland.

As previously mentioned, the hypothesis posited that during sudden emergencies, a plethora of information and knowledge is amassed, disseminated, widely shared, and owned by numerous organizations. Hence, the necessity for a cohesive information system to effectively disseminate and share knowledge in order to aid those affected by the crisis.

As already indicated, the authors of the paper actively participated in a humanitarian operation during the initial weeks of the crisis, both independently and in collaboration with non-governmental organizations, occurring in February and March 2022. Subsequently, during this timeframe and immediately thereafter, phase 1 of the research was conducted. The research employed a methodology encompassing participant observation and a diagnostic survey administered through a questionnaire.

The aim of the study was to explore the potential for establishing knowledge management standards during humanitarian crises. The research utilized a survey questionnaire administered directly in locations where humanitarian operations were underway. A purposive sampling method was employed, with volunteers from organizations actively engaged in assisting on the Polish-Ukrainian border invited to participate in the study. A total of 123 correctly completed questionnaires were collected during the initial phase of the crisis. Subsequently, in 2023, the research was replicated with the same methodological framework. Following the second phase of the crisis, 217 correctly completed questionnaires were obtained.

This paper presents the results of research on the need to use an information system in the dissemination and sharing of knowledge (results from two phases of the research are presented). Another analysed issue is the assessment of aspects of knowledge management in a crisis situation. This question was asked in the second round of research because it was considered that a time distance would be necessary to make the first assessments.

Table 1: Valuing the need to use an information system in the dissemination and sharing of knowledge (2022, n=123)

No.	Specification	0	1	2	3
1.	It is necessary to use an IT system to manage knowledge.	0%	3.3%	14.6%	82.1%
2.	The introduction and use of an information system increases the effectiveness of assistance.	0%	12.2%	13.0%	74.8%
3.	It is necessary to introduce a database of good practices.	0%	0.8%	16.3%	82.9%
4.	A coherent system of recording current activities of charitable organizations is needed.	34.2%	35.7%	17.1%	13.0%
5.	A coherent information system for the exchange of experiences (forums and discussion groups) is needed.	0%	47.2%	47.9%	4.8%
6.	A coherent information exchange system for the group of experts is needed.	24.4%	55.3%	18.7%	1.6%
7.	A coherent nationwide portal is needed where refugees from Ukraine can find various forms of support.	0%	1.6%	14.7%	83.7%
8.	A coherent nationwide portal is needed where helpers (volunteers and charities) can find a variety of information.	0%	8.2%	3.3%	88.6%

Where: 0 - disagree 1 - slightly agree 2 - moderately agree 3 - strongly agree

Source: Own elaboration based on a survey

Tables 1 and 2 depict the findings from the research regarding the significance of individual aspects of the information system in disseminating and sharing knowledge during crisis situations. The results indicate that the passage of time between both phases of the study influenced certain outcomes.

Across both studies, the consensus regarding the necessity of employing a cohesive IT system for knowledge management during crisis situations remained steadfast, with over 80% of respondents strongly agreeing with this proposition. Moreover, support for the notion that such a system would enhance aid effectiveness saw a marginal increase, with the percentage of those strongly in agreement rising from 74.8% to 79.3%. Conversely, backing for the implementation of a database of good practices experienced a decline, decreasing from 82.9% to 71.9% respectively.

Table 2: Valuing the need to use the information system in the dissemination and sharing of knowledge (2023, n=217)

No.	Specification	0	1	2	3
1.	It is necessary to use an IT system to manage knowledge.	0.0%	1.4%	12.9%	85.7%
2.	The introduction and use of an information system increases the effectiveness of assistance.	0.0%	5.5%	15.2%	79.3%
3.	It is necessary to introduce a database of good practices.	3.2%	6.9%	18.0%	71.9%
4.	A coherent system of recording current activities of charitable organizations is needed.	18.9%	28.6%	35.0%	17.5%
5.	A coherent information system for the exchange of experiences (forums and discussion groups) is needed.	10.1%	18.9%	30.0%	41.0%
6.	A coherent information exchange system for the group of experts is needed.	14.7%	29.0%	40.1%	16.1%
7.	A coherent nationwide portal is needed where refugees from Ukraine can find various forms of support.	0.0%	1.8%	14.7%	83.4%
8.	A coherent nationwide portal is needed where helpers (volunteers and charities) can find a variety of information.	3.2%	18.0%	28.1%	50.7%

Where: 0 - disagree 1 - slightly agree 2 - moderately agree 3 - strongly agree

Source: Own elaboration based on a survey

Over time, as aid organizations coordinated their efforts, there was a notable increase in support for a cohesive system to document the ongoing activities of charitable organizations, with the combined indications for moderate and strong agreement rising from 30.1% to 52.5%. This increase was even more pronounced for specific facets of the information system: 1) The percentage of respondents indicating moderate and strong endorsement for a unified system to document the current activities of charitable organizations increased by

approximately 17.5%; 2) There was an 18.3% increase in support for the notion of establishing a platform for exchanging experiences, encompassing forums and discussion groups.

While the percentage of respondents fully supporting a nationwide portal for individuals in need remained steady, slightly above 80%, there was a notable decrease in support for a comparable system designed for aid institutions. In 2022, 88.6% strongly agreed with this concept, but by 2023, this figure dropped to 50.7%. This trend indicates that over time, aid organizations established their own methods for coordination and collaboration.

Table 3 illustrates the findings from the assessment of individual aspects of knowledge management during a crisis situation, conducted during the second phase of the research. Analysis of the results reveals a significant improvement in the rating of access to up-to-date information during the post-crisis phase. Specifically, 44.7% of respondents indicated a rating of 4, while 26.3% indicated a rating of 5. In contrast, during the crisis situation, only 8.8% and 6% of respondents provided ratings of 4 and 5, respectively. However, access to central knowledge databases was rated low during the crisis, with the most frequently selected rating being 2 (40.1% of responses). Similarly, the presence of up-to-date information in these databases received low ratings, with 2 being the most frequently selected rating (35.9% of responses).

Table 3: Assessment of knowledge management aspects in a crisis situation (2023, n=217)

No.	Specification	1	2	3	4	5
1	Availability of up-to-date information during the crisis	11.1%	21.7%	52.5%	8.8%	6.0%
2	Availability of up-to-date information in the post-crisis phase	3.7%	5.5%	19.8%	44.7%	26.3%
3	Access to the central knowledge base during a crisis	16.6%	40.1%	20.7%	16.1%	6.5%
4	Up-to-date information available in the knowledge base	19.8%	35.9%	30.9%	7.8%	5.5%
5	The speed of response of public authorities to a suddenly emerging problem	14.7%	20.7%	41.0%	12.4%	11.1%
6	The speed of the organization's adaptation to a dynamically changing situation	0.9%	14.3%	14.7%	24.9%	45.2%
7	Effectiveness of communication between NGOs	4.1%	8.3%	33.6%	29.0%	24.9%
8	Effectiveness of communication between NGOs and public services	9.7%	22.1%	41.0%	11.1%	16.1%
9	Cooperation and coordination of aid activities	12.4%	18.0%	36.4%	24.9%	8.3%
10	The usefulness of the external knowledge sources	3.7%	15.7%	31.3%	26.7%	22.6%
11	Long-term learning from the experience of the first phase of the crisis	6.5%	11.1%	33.2%	20.3%	29.0%

Where: 1- the lowest mark; 5-the highest mark

Source: Own elaboration based on a survey

The response speed of public authorities to the sudden emergence of a problem received an average rating, with 3 being the most frequently indicated rating (41%). Conversely, the response speed of non-governmental organizations (NGOs) garnered higher ratings, with the majority of respondents selecting the highest rating (45.2%). The effectiveness of communication among NGOs was rated positively, with 53.9% of respondents indicating ratings of 4 and 5, compared to the effectiveness of communication between NGOs and public organizations, where only 27.2% of respondents rated it as 4 or 5.

Assessment of the cooperation and coordination of aid activities and the usefulness of external sources of information yielded average ratings, with 36.4% and 31.3% of respondents respectively indicating a rating of 3.

A crucial criterion for evaluating effectiveness is the ability to engage in long-term learning based on experiences from the initial phase of the crisis. Half of the respondents evaluated this aspect positively, with 20.3% selecting a rating of 4 and 29% selecting a rating of 5. This distribution of responses suggests that NGOs are better equipped to handle potential future crises.

The findings from participant observation aligned with the aforementioned results, revealing that during the initial phase of the crisis, the effectiveness of knowledge acquisition from institutions and organizations was relatively constrained. Given the dynamic nature of the situation on the Polish-Ukrainian border at that time, information was not consistently available on internet information websites. Nonetheless, participants engaged in aid activities expressed a strong desire to acquire such knowledge.

These findings also underscored the significance of informal groups as a means of managing knowledge and facilitating its transfer. Informally provided information often proved to be the sole available knowledge source,

offering real-time updates, reliability, and alignment with recipients' needs. Overall, a notable willingness among volunteers and other stakeholders to share knowledge during the crisis was observed. However, the implementation of a unified knowledge management system during that period could have significantly enhanced aid activity coordination.

6. Conclusions

Several compelling reasons underscore the importance of knowledge management in humanitarian organizations. Firstly, operational effectiveness: Humanitarian organizations frequently operate in crisis environments where rapid decision-making is imperative for saving lives and mitigating suffering. Efficient knowledge management facilitates the optimal utilization of resources, identification of effective strategies, and swift adaptation to evolving conditions. In contemporary contexts, the efficacy of knowledge management is often enhanced through the integration of artificial intelligence and modern information technologies (Al Mansoori et al., 2020).

Secondly, information exchange: Humanitarian organizations employ people with different specializations and experiences, often from different countries and cultures. Knowledge management facilitates effective exchange of information between various departments of the organization, which promotes better understanding of the situation and taking appropriate actions (Golba, 2015).

Thirdly, avoiding repetitions: In crisis situations, time is precious, so it is important to avoid repetitions and use existing knowledge and experiences. Effective knowledge management allows for the collection and sharing of information about previous interventions and best practices (Hall & Andriani, 2003).

Lastly, skill development and activity enhancement: Analysing activities conducted across diverse humanitarian missions yields invaluable insights into their effectiveness and areas necessitating improvement. Knowledge management facilitates the collection of these insights, enabling their utilization to enhance processes and train organization employees.

The results initially supported the hypothesis, demonstrating that knowledge during the analysed humanitarian crisis was widely dispersed among various organizations. The evident need for an efficient knowledge management system underscored the importance of swiftly identifying knowledge gaps while continuously assessing information requirements. However, the presented research results have certain limitations concerning the selection of studied issues. Therefore, to fully verify the assumed hypothesis, further extended research is necessary. Converting accumulated tacit knowledge into accessible and comprehensible information for all individuals involved in the assistance efforts is crucial, and future research should illustrate methods to achieve this.

References

- Ahmed, P.K., Lim, K.K., & Loh, A.Y.E. (2002), *Learning Through Knowledge Management*, Butterworth – Heineman, Oxford.
- Al Mansoori, S., Salloum, S. A., & Shaalan, K. (2020) "The impact of artificial intelligence and information technologies on the efficiency of knowledge management at modern organizations: a systematic review", *Studies in Systems, Decision and Control Recent Advances in Intelligent Systems and Smart Applications*, pp. 163-182.
- Asmussen, J. (2014) "International Crisis Management and Human Security in the Framework of 'Hybrid Wars' and Unrecognized States: Lessons Learned from Ukraine", *Security and Human Rights*, Vol. 25(3), pp. 287-297.
- Chmielewska-Banaszak, D. (2010) "Wiedza milcząca w nauce. Koncepcja Michaela Polanyi'ego", *Zagadnienia Naukoznawstwa*, 1(183).
- Collins, H. (2019) *Tacit and explicit knowledge*, The University of Chicago Press.
- Da Silva Avanzi, D., Foggiatto, A., dos Santos, V.A., Deschamps, F., de Freitas Rocha Loures, E., "A framework for interoperability assessment in crisis management", *Journal of Industrial Information Integration*, Vol. 5, pp 26-38.
- Egger, C., & Schopper, D. (2022) "Organizations Involved in Humanitarian Action: Introducing a New Dataset", *International Studies Quarterly*, Vol 2, No 66.
- Freedman, L. (2023) "Humanitarian Challenges of Great Power Conflict: Signs from Ukraine", *Dædalus*, Vol. 152(2), pp 40-51.
- Golba, D. (2015), "Wolontariat pracowniczy a dzielenie się wiedzą w organizacji", *Rynek, Społeczeństwo, Kultura*, Vol. 3 (15).
- Haaland, H., & Wallevik, H. (2019) "Beyond crisis management? The role of Citizen Initiatives for Global Solidarity in humanitarian aid: the case of Lesbos", *Third World Quarterly*, 40(10), pp 1869-1883.
- Hall, R., & Andriani, P. (2003) "Managing knowledge associated with innovation", *Journal of Business Research*, Vol. 56(2), pp 145-152.

- Hislop, D., Bosua, R., & Helms, R. (2018), *Knowledge management in organizations: A critical introduction*, Oxford University Press.
- Karamat, J., Shurong, T., Ahmad, N., Waheed, A., & Khan, S. (2018) "Barriers to knowledge management in the health sector of Pakistan", *Sustainability*, Vol. 10(11), pp 1-22.
- Karamitri, I., Kitsios, F., & Talias, M. A. (2020) "Development and validation of a knowledge management questionnaire for hospitals and other healthcare organizations", *Sustainability*, Vol. 12(7), pp 27-30.
- McGill, E., Halliday, E., Egan, M., & Popay, J. (2023) "Knowledge exchange in crisis settings: A scoping review", *PLoS ONE* 18(2)
- Mena, R. & Hilhorst, D. (2022) "The transition from development and disaster risk reduction to humanitarian relief: the case of Yemen during high-intensity conflict", *Disasters*, Vol. 46(4), pp 1049–1074.
- OECD (2019), *OECD Policy Framework for Effective and Efficient Humanitarian Action*, OECD Publishing, Paris.
- OECD (2024), *DAC Recommendation on the Humanitarian-Development-Peace Nexus*, OECD/LEGAL/5019, <https://legalinstruments.oecd.org/public/doc/643/643.en.pdf> (Accessed: 13 February 2024).
- OHCHR, (2022), *Ukraine civilian casualty Update*, United Nations, December, 5, 2022.
- Patel, S. S., & Erickson, T. B. (2022) "The new humanitarian crisis in Ukraine: Coping with the public health impact of hybrid warfare, mass migration, and mental health trauma", *Disaster medicine and public health preparedness*, Vol. 16(6), pp 2231-2232.
- Polanyi, M. (2009) *The tacit dimension*. In *Knowledge in organisations*, The University of Chicago Press.
- Polish Aid, (2024) <https://www.gov.pl/web/polishaid> (Accessed: 13 February 2024).
- Rabiei, P., Arias-Aranda, D., Stantchev, V. (2023) "Introducing a novel multi-objective optimization model for volunteer assignment in the post-disaster phase: Combining fuzzy inference systems with NSGA-II and NPGA", *Expert Systems With Applications*, Vol 226, 120142.
- Siauwsh, N., Peszynski, K., Vo-Tran, H., Young, L. (2023) "Toward the creation of disaster-resilient communities: The Machizukuri initiative – The 2011 Tōhoku Great East Japan Earthquake and Tsunami", *International Journal of Disaster Risk Reduction*, Vol. 96.
- Singh, A. (2023) "Policy Implementation and Best Practices in Disaster Management", in: Singh, A. (eds) *International Handbook of Disaster Research*, Springer, Singapore.
- Smith, E. A. (2001) "The role of tacit and explicit knowledge in the workplace", *Journal of knowledge Management*, Vol. 5(4), pp 311-321.
- Stępień-Załucka, B., & Uliasz, J. (2023) "The right to humanitarian aid and human dignity. Observations against the background of the law on assistance to Ukrainian citizens in Poland", *Probation*, Vol. 3, pp 53-80.
- Sternberg, R.J., Forsythe, G.B., Hedlung, J., Horvath, J.A., & Wagner R.G. (2000), *Practical Intelligence in Everyday Life*, Cambridge University Press, Cambridge.
- Taouktsis, X. & Zikopoulos, Ch., "A decision-making tool for the determination of the distribution center location in a humanitarian logistics network", *Expert Systems With Applications*, Vol. 238, 122010.
- United Nations (2022), *Conflict, Humanitarian Crisis in Ukraine Threatening Future Global Food Security as Prices Rise, Production Capacity Shrinks, Speakers Warn Security Council*, <https://press.un.org/en/2022/sc14846.doc.htm> (Accessed: 13 February 2024).
- Wąsowska, A. (2018) "Zarządzanie wiedzą w organizacjach pożytku publicznego czynnikiem ich sukcesu", *Zeszyty Naukowe Politechniki Częstochowskiej. Zarządzanie*, Vol. 31, pp 282-293.
- Williams, P. M. (2012) "Integration of health and social care: a case of learning and knowledge management", *Health & social care in the community*, 20(5), pp. 550-560.
- Zins, C. (2007) "Conceptual approaches for defining data, information, and knowledge", *Journal of the American society for information science and technology*, Vol. 58(4), pp 479-493.