Accessing care in an unfamiliar environment: experiences of tūroro Māori and their whānau when transported outside their local area after a cardiac emergency

Aroha Brett, Maia Watling, Felicity Bright, Sarah Penney, Bridget Dicker, Graham Howie, Karen M Brewer

ABSTRACT

AIM: After an acute cardiac event tūroro (patients) are often transported to a hospital with specialist cardiac services, sometimes far from home. While such hospitals offer specialist care, it is unknown how transport out-of-area affects tūroro and whānau (family) holistically. This study explored tūroro Māori and whānau experiences and perceptions of transport away from their community after an acute cardiac event.

METHODS: Using a Kaupapa Māori research approach, five semi-structured interviews and two focus groups were undertaken with tūroro Māori and/or whānau. A general inductive approach was used for analysis.

RESULTS: Participants reported a wide range of positive and negative experiences. There was one overarching theme—accessing care in an unfamiliar environment, and two sub-themes—whānau support and mana-enhancing communication. Receiving care in an unfamiliar environment placed added stress on tūroro and whānau and meant that mana-enhancing communication was of utmost importance (a holistic view ensuring the tūroro and whānau retain their power and decision making with all communication).

CONCLUSION: Tūroro and whānau transported away from home following a serious cardiac event described the challenges associated with receiving care in an unfamiliar environment. The resulting uncertainty for the tūroro and travel and financial burden for whānau added to what was already a stressful time. Many of the challenges inherent in this situation can be mitigated with mana-enhancing communication.

Aotearoa New Zealand emergency medical services (EMS) destination policies currently dictate that tūroro (patients) with a ST-elevation myocardial infarction, a specific type of heart attack presenting with electrocardiogram (ECG) changes, are to be transported by EMS to hospitals with specialist cardiac capabilities such as percutaneous coronary intervention (PCI).[1] In transporting to these hospitals, local hospitals are commonly bypassed and tūroro are transported away from their home area (rohe).[2] Routine transport to hospitals that offer PCI or other specialist cardiac care may improve equity in outcomes for Māori, who sustain significant inequity in both incidence and outcomes relating to cardiac events.[2] However, Māori are also more likely to live rurally,[3] meaning there are much greater distances to travel to tertiary hospitals offering specialist cardiac care. The holistic impact on tūroro and whānau (family) of bypassing a local hospital in favour of potentially improved specialist care and better clinical outcomes at a more distant hospital is not known.

Hospital admissions in emergency situations are highly stressful,[4] with some describing it as a "*time of chaos*", accompanied by fear, uncertainty, hope and vulnerability.[5] Out-of-area transport brings additional challenges: travel, accommodation, carer burden and communication.[6] Whānau stress is likely to be greater if the tūroro does not survive, although little is known about this. Existing research on Māori experiences of out-of-area hospital transport for diverse health conditions has highlighted that services focussed on the unwell individual and did not provide a whānau-centred approach.[7] If the transport is at the expense of whānau support, connectedness to whenua (land) and the holistic wellbeing of the tūroro, there may be inequity in experience and in more holistic outcomes for both tūroro and

whānau.[8] Urgent transport away from whānau and whenua has the potential to cause stress and harm to tūroro Māori (Māori patients), given the intertwined identities of people and land.[9] Critical transport also impacts whānau ability to support their whānau members, and affects their finances, accommodation and transport.[10] Despite these challenges, it is possible that out-of-area transport may be seen as desirable if people believe the specialist services could improve survival,[11] so long as tūroro and whānau are well-supported. Understanding the needs and experiences of Māori is essential to ensuring policy and practice supports hauora (health and wellbeing) and whānau ora (family wellbeing). Alongside a quantitative analysis of tūroro outcomes,[12] this qualitative study of tūroro Māori and whānau experiences and perceptions of transport away from their community after an acute cardiac event is part of a programme of research to determine best practice in EMS destination policies regarding cardiac care in Aotearoa New Zealand. Understanding the potential effects of transport away from communities can inform future policy and practice changes to achieve equity in experience and in outcome.

Methods

This is Kaupapa Māori research, underpinned by Kaupapa Māori theory, drawing on Māori research methods and led by Māori researchers. Kaupapa Māori theory supports Māori development and the centring of Māori narratives, as well as providing a framework to critically analyse systems and the root causes of current inequities, including colonialism and racism that lead to poorer health outcomes and inequities.[13] Kaupapa Māori approaches to participant engagement were followed, based on the Hui Process.[14] This involved four key elements: mihi—initial contact, greeting and engagement; whakawhanaungatanga—making a connection between the researchers and the participants; kaupapa—the interviews/whānau hui (focus groups); poroporoaki—concluding with acknowledgement, feedback and check-in with participants. The kōrero (discussion) that occurred at the "kaupapa" stage constitutes data for the analysis detailed in this article. Analysis was guided by Kaupapa Māori research practices described by Curtis.[13] These included ensuring the research will have direct benefits for Māori, keeping the research under Māori control, rejecting victim-blaming and cultural-deficit theories and accepting diverse Māori realities.

Researcher positionality

As Kaupapa Māori research, this was led by Māori researchers with assistance of non-Māori allies. AB (Ngāti Ranginui, Ngāti Maniapoto, Ngāti Rangi) is a clinical and community hauora Māori and equity advisor for Hato Hone St John. MW (Ngāti Kurī, Ngāpuhi, Tainui) is an emerging Māori researcher. FB (Pākehā) is a speech-language therapist and qualitative health researcher. SP (Te Rarawa) is a registered paramedic and a lecturer and Kaupapa Māori health researcher at the Auckland University of Technology. BD (Pākehā) is a paramedic and a resuscitation/EMS researcher. GH (Pākehā) is a researcher in paramedicine. KB (Whakatōhea, Ngāi Te Rangi) is a speech-language therapist and Kaupapa Māori health researcher.

Eligibility criteria

Inclusion criteria were: Māori aged 18 years or older, had experienced a cardiac event (for example, a heart attack or cardiac arrest) in the community between April 2018 and May 2024, or whānau of someone who experienced a cardiac event, and could provide insight into the experience or implications of being transported outside of the region where they lived.

Recruitment

Participants were recruited using flyers distributed via social media, healthcare providers, community groups and email.

Data collection

Data collection included five semi-structured individual interviews and two whānau hui. Whānau hui and interviews were conducted by AB, with support in the whānau hui from MW and BD. Interviews were conducted using a mix of kanohi ki te kanohi (face-to-face), video conferencing (Zoom, Microsoft Teams) and telephone. Both whānau hui were conducted kanohi ki te kanohi.

In keeping with Kaupapa Māori research, whakawhanaungatanga was central to the recruitment and interview/whānau hui process. This often involved kanohi ki te kanohi visits with shared kai (food), slowly leading to data collection as the relationship was formed. To encourage interview and whānau hui participants to voice experiences in their own words, interviews were semi-structured with open-ended questions.

Participants were asked about their cardiac event and the travel experience between the location of their cardiac event to the given hospital with specialist cardiac services. They were also asked about the impacts this had on their whānau and how they were affected during this process and the negative and positive experiences they had.

Data analysis

Audio recordings from interviews and whānau hui were transcribed. These were analysed in several ways: first AB and MW engaged in data familiarisation, reviewing audio recordings and transcripts to become familiar with what was discussed and *how* it was discussed (e.g., attending to non-verbal communication). A general inductive approach was used for analysis.[15] Initial codes were manually developed from the transcripts. These were revised and categorised into themes prioritising categories that aligned with the research objectives, using Miro mind mapping software (https://miro.com/mind-map/). Themes were then discussed and reviewed with AB and KMB. Recognising the diversity of tūroro and whānau experiences, we did not pursue data saturation.

Ethics

Ethics approval was acquired from the Auckland University of Technology Ethics Committee (AUTEC) (22/294).

Results

Participant details are provided in Tables 1, 2 and 3.

Participants reported a wide range of positive and negative experiences of being uplifted from

Table 1: Individual interview participants—tūroro.

Participant	Gender	Residence	North vs South Island	Time since event
A	Female	Rural R2	North	2 years
B	Female	Urban U1	South	3 years
C	Male	Rural R1	North	1 year
D	Female	Urban U2	North	1 year
E	Female	Urban U2	North	1 year

Rural/urban classification is defined using the Geographic Classification for Health.[3]

Table 2: Focus group one participants.

Participant	Gender	Connection to the tūroro
1	Male	Tūroro
2	Female	Whānau member (witnessed the event)
3	Female	Whānau member
4	Female	Whānau member
5	Female	Whānau member
6	Male	Different whānau

The experiences of the focus group one whānau took place in a rural (R2) area[3] in the North Island, approximately 30 years ago.

Table 3: Focus group two participants.

Participant	Gender	Connection to the tūroro
1	Male	Tūroro
2	Female	Whānau member (witnessed the event)
3	Male	Whānau member (witnessed the event)
4	Male	Whānau member
5	Female	Whānau member
6	Male	Whānau member

The experiences of the focus group two whānau took place in an urban (U2) area[3] in the South Island, 6 years ago.

their homes and transported to a hospital with specialist cardiac services. Despite the stressful situation, many participants spoke highly of the service they received throughout the care pathway and understood that transport to a hospital with specialist cardiac services ensures access to specialised medical care and interventions unavailable at local facilities. However, analysis also revealed the nuances within their experiences. These are reflected within one overarching theme—accessing care in an unfamiliar environment, with two sub-themes—whānau support and mana-enhancing communication (a holistic view ensuring the tūroro and whānau retain their power and decision making with all communication). Although people received the specialist care they required, being transported to an unfamiliar environment placed added stress on tūroro and whānau and meant that mana-enhancing communication was of utmost importance.

Accessing care in an unknown environment

To receive optimal care, tūroro were prepared to be taken away from their whānau, their familiar environments and the systems they were accustomed to. One tūroro commented: "*We'd want the best for our people, and we'd want the best to coming home, and an awesome environment*." Tūroro and whānau did not always perceive there to be a benefit in being away from home, with one whānau member lamenting that "*Coming home to* [hometown], *with your own community, would have been more beneficial for her. She would have healed faster with her whānau around her, or even if she were at home in her own environment with the care going in*."

Although most people recognised the benefits of being transported out-of-area to a hospital with specialist cardiac services, this process was overwhelming. Tūroro often could not remember their experience with first responders. As their condition stabilised and they became aware of their surroundings, there were many stories of satisfaction with initial treatment in local hospitals and with the care of ambulance personnel. However, after being transported to the hospital with specialist cardiac services, many had feelings of unsettlement and confusion. Because hospitals with specialist cardiac services are often much bigger and run differently to smaller rural hospitals, tūroro did not always know who would look after them or when they would be seen.

One participant spoke:

> *"The medical doctor I had was excellent but get to that* [hospital with specialist cardiac services], *you never get to see the head cardiologist, because in one team there's 10 doctors, but you never get to see the cardiologist himself."*

Another participant commented: "*That's only the second or third hospital visit I've had—the first in* [city]. *I didn't know what goes on in* [city hospital]. *It would have actually been nice to have been told some of these things*."

Unfamiliar systems, coupled with the stress of a major cardiac event, left some participants feeling vulnerable. This resulted in them turning to people and environments with which they had previous experiences, relationships and

connections, thereby increasing their levels of comfort. One participant explained: "*Because I was still having problems; I rang* [hospital], *because I used to live there, and I know the cardiologist up there, so I rang him*." People's own networks and resources helped support and sustain them at this challenging time.

Whānau support

Navigating unknown environments was particularly stressful for whānau members. As one participant put it: "*A hospital close means that you can go and support easier*." Transport to a hospital with specialist cardiac services could place significant travel and financial burden on whānau, particularly given that there is limited space for a support person to travel with the tūroro. Thus, other whānau who wished to be present must organise and fund their own transport and accommodation. Many participants shared this experience, with one stating:

> "[Whānau member] *had to drive up in the middle of the night which wasn't ideal because he didn't have any accommodation, he didn't have any money. He had all the kids, so he had to just jump in the car and drive, and it's a big drive, a big drive from* [town], *especially when you don't really know what's happening too much. He arrived in the early hours of the morning. I think he ended up staying in a backpackers or something, didn't you? He had to come over and get* [tūroro's] *credit card."*

While some hospitals with specialist cardiac services have systems to support families from out of town, many of the participants described difficulties in accessing these services, finding them unaccommodating for larger families, or they were not informed about them until it was too late. As described by these participants:

> *"I did ask about the whānau house. Only my daughter could go there and not my grandchildren. Then my partner came up from* [hometown]. *He had to get accommodation somewhere else. Where my grandchildren were, he couldn't go there because there was no more room."*

> *"They've got a Māori service provider. They actually didn't come and see me until 3 days before I come out … What happened was she told me what their service was. My family could have got accommodation through them, but nobody told us that until 3 days before my leaving."*

Mana-enhancing communication

When a whānau is under stress, in an unfamiliar environment, mana-enhancing communication is vital. To work with Māori is to respect and integrate their cultural values and beliefs. One value that Māori hold is uplifting mana. Incorporating mana means recognising a tūroro's mental, emotional and spiritual wellbeing rather than just focussing on their disease. It acknowledges who they are, where they've come from and where they are going. To acknowledge somebody's mana is to acknowledge the person entirely. If a person comes into a new environment where their mana is uplifted, it can help them navigate the space more easily. To takahi (stomp) on somebody's mana is to dismiss the person, leading to feelings of mamae (hurt) and shame. In healthcare, it is important for healthcare professionals to use mana-enhancing communication and understand that every tūroro has their own story.

Some participants' experiences left them feeling like their mana was not uplifted and that medical teams were inconsiderate. One participant spoke about the conversations she overheard during her surgery and how she felt it was quite insensitive "*at such a critical period*":

> *"I was fine with it, but I said if you're really struggling with everything and the fact of you're having major surgery and you've just had a heart attack and literally died, and there's this conversation happening, it's quite insensitive."*

When offered the chance to make a formal complaint she declined because she did not want to make a fuss; "*that's not who we are as Māori*."

Mana-enhancing communication was also noted as critical not just with the tūroro but also whānau. Good, reciprocal communication allowed the tūroro and whānau to feel heard and seen, making their stay easier and more comfortable in the unfamiliar environment. This was shown by one tūroro:

> *"I tell you what—they've got a team down in* [hospital with specialist cardiac

services] *that tells you everything around your procedure, your surgery, your defibrillator and everything else. They were really thorough. Very thorough. I understood them perfectly."*

Discussion

In this qualitative Kaupapa Māori study we explored tūroro and whānau experiences and perceptions of transport away from their community after an acute cardiac event. An understanding of these experiences will help inform EMS policy and practice to achieve equity in experience and outcomes for Māori.

When working with Māori, a holistic approach is fundamental to their recovery and wellbeing. Such an approach must account for whānau involvement and whānau wellbeing. It is of concern that whānau were not always aware of the supports available to them while in hospital. This could be remedied by prompt referral to the hospital Māori health team for all cardiac tūroro who are transported from out-of-area. Anyone who did not wish to receive this support could decline the referral on first contact. Having support services available from the start, and effective communication so that tūroro and whānau are able to access them, can help whānau members navigate their stay in unknown environments and decrease stress levels, which in turn will increase tūroro wellbeing.

Māori heart tūroro have reported a lack of trust in the health system and reluctance to go to hospital due to previous and ongoing bad experiences.[16,17] Being thrust into an unfamiliar environment, without sufficient guidance and support from healthcare providers, leaves whānau reliant on their own resources. Such experiences can perpetuate feelings of dissatisfaction and mistrust. In this context, effective reciprocal mana-enhancing communication with tūroro and whānau is essential to improve heart health outcomes and enhance tūroro and whānau experiences.[16–18] As shown by the findings of this study, the importance of good communication is heightened when a whānau is under stress, having been transported to an unfamiliar environment. When healthcare providers take the time to form reciprocal relationships and discuss diagnosis and treatment in an accessible way, it not only improves clinical outcomes by ensuring tūroro adhere to their treatment plans but also enhances the overall tūroro experience by reducing anxiety, empowering tūroro and fostering a collaborative approach to health management.[17,18]

Clinical implications

Under current EMS policy, decisions on where to transport cardiac tūroro are made based on clinical outcomes rather than a holistic approach to the tūroro and their whānau.[1] The results of this research indicate that tūroro and whānau want the most appropriate clinical care, even if that means being transported out of their area. This supports the current policy directions. However, insights gained from this research also show the importance of mana-enhancing communication. EMS staff would benefit from training in how to support mana-enhancing communication at all times, so that more holistic care can be given to the tūroro and whānau even when the need for clinical care means that transport out-of-area is necessary.

Alongside the qualitative analysis, this programme of work also investigated whether there was a quantitative survival benefit for tūroro following a cardiac arrest for direct transport to a hospital with specific capabilities deemed a cardiac arrest centre.[12] Results indicated that, while not statistically significant, compared to a non-specialist hospital an odds ratio of 0.78, equivalent to a 22% decrease in 30-day mortality, is consistent with the benefits associated with management by a cardiac arrest centre. This potential mortality benefit is in alignment with international literature for tūroro with a cardiac arrest secondary to a cardiac cause having a higher survival benefit if transported directly to a specialist cardiac arrest centre.[19–21] Further research with a larger cohort is required to determine a treatment effect. However, given the potential for benefit and if its implementation could be delivered in a way that empowers tūroro then it would likely enhance survival outcomes if tūroro were directly transported to hospitals with appropriate specialist services. Complementing the quantitative data, the current study adds important information for healthcare providers involved in decisions around transport to hospitals with specialist cardiac services. Namely, to increase the wellbeing of tūroro and whānau in these circumstances, mana-enhancing communication and support for whānau is essential.

Conclusions

Because cardiac events are sudden and unexpected, it is impossible to prepare for them

and the process can be daunting and stressful. Tūroro and whānau transported away from home following a serious cardiac event described the challenges associated with receiving care in an unfamiliar environment. The resulting uncertainty for the tūroro and travel and financial burden for whānau added to what was already a stressful time. Many of the challenges inherent in this situation can be mitigated with mana-enhancing communication.

COMPETING INTERESTS
This research was supported by a 2022 Pūtahi Manawa | HHANZ CoRE Equity Grant Round.
BD is an employee of Hato Hone St John and Auckland University of Technology.
AB is an employee of Hato Hone St John and a participant in the Hato Hone St John Māori Locality Review Committee.
FB is a DSMC member for HRC funded project on stroke rehabilitation and a Chair for the Programme Accreditation Committee, New Zealand Speech-language Therapists' Association.
KB was a Waitangi Tribunal WAI 2736 technical witness in November 2022, participates in the Health Research Council of New Zealand reviewing committee 2024 and is Co-Director of Pūtahi Manawa | Healthy Hearts for Aotearoa New Zealand (CoRE).

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AUTHOR INFORMATION
Aroha Brett: School of Clinical Sciences, Te Wānanga Aronui o Tāmaki Makau Rau Auckland University of Technology (AUT), Auckland, New Zealand; Hato Hone St John, Auckland, New Zealand.
Maia Watling: School of Clinical Sciences, Te Wānanga Aronui o Tāmaki Makau Rau Auckland University of Technology (AUT), Auckland, New Zealand.
Felicity Bright: School of Clinical Sciences, Te Wānanga Aronui o Tāmaki Makau Rau Auckland University of Technology (AUT), Auckland, New Zealand.
Sarah Penney: School of Clinical Sciences, Te Wānanga Aronui o Tāmaki Makau Rau Auckland University of Technology (AUT), Auckland, New Zealand.
Bridget Dicker: School of Clinical Sciences, Te Wānanga Aronui o Tāmaki Makau Rau Auckland University of Technology (AUT), Auckland, New Zealand; Hato Hone St John, Auckland, New Zealand.
Graham Howie: School of Clinical Sciences, Te Wānanga Aronui o Tāmaki Makau Rau Auckland University of Technology (AUT), Auckland, New Zealand; Hato Hone St John, Auckland, New Zealand.
Karen M Brewer: Faculty of Medical and Health Sciences, Waipapa Taumata Rau | The University of Auckland, Auckland, New Zealand.

CORRESPONDING AUTHOR
Dr Karen M Brewer: Faculty of Medical and Health Sciences, Department of General Practice and Primary Health Care, The University of Auckland, Private Bag 92019, Auckland 1142, New Zealand. Ph: +64 9 9234694. E: k.brewer@auckland.ac.nz

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REFERENCES
1. National Ambulance Sector Working Group. Emergency Ambulance Service Clinical Procedures and Guidelines Version: 1.0.4.4. [Internet]. NZ: Hato Hone St John; 2024 [cited 2024 Jun 25]. Available from: https://cpg.stjohn.org.nz/
2. Dicker B, Todd VF, Tunnage B, et al. Ethnic disparities in the incidence and outcome from out-of-hospital cardiac arrest: A New Zealand observational study. Resuscitation. 2019;145:56-62. doi: 10.1016/j.resuscitation.2019.09.026.
3. Minister of Health. Rural Health Strategy [Internet]. Wellington (NZ): Ministry of Health – Manatū Hauora; 2023 [cited 2024 Jun 10]. Available from: https://www.health.govt.nz/system/files/2023-07/rural-health-strategy-oct23-v2.pdf
4. Bergman L, Pettersson M, Chaboyer W, et al. In safe hands: Patients' experiences of intrahospital transport during intensive care. Intensive Crit Care Nurs. 2020;59:102853. doi: 10.1016/j.iccn.2020.102853.
5. Uhrenfeldt L, Aagaard H, Hall EO, et al. A qualitative meta-synthesis of patients' experiences of intra-and inter-hospital transitions. J Adv Nurs. 2013;69(8):1678-90. doi: 10.1111/jan.12134.
6. Karlsson J, Eriksson T, Lindahl B, Fridh I. Family members' lived experiences when a loved one undergoes an interhospital intensive care unit-to-unit transfer: A phenomenological hermeneutical study. J Clin Nurs. 2020;29(19-20):3721-30. doi: 10.1111/jocn.15402.
7. Masters-Awatere B, Cormack D, Brown R, et al. The hospital transfers project: supporting whanau engagement during hospitalisations [Internet]. Auckland (NZ): Ngā Pae o te Māramatanga New Zealand's Māori Centre of Research Excellence; 2019 [cited 2024 Jun 10]. Available from: https://www.maramatanga.ac.nz/media/5815/download?inline
8. Masters-Awatere B, Cormack D, Graham R, et al. Whānau experiences of supporting a hospitalised family member away from their home base. Kōtuitui. 2024;19(1):86-104. doi: 10.1080/1177083X.2023.2227234.
9. Mahuika R. Kaupapa Māori theory is critical and anti-colonial. MAI Rev. 2008;3(4):1-16.
10. Masters-Awatere B, Cormack D, Graham R, Brown R. Observations by and conversations with health workers and hospital personnel involved in

transferring Māori patients and Whānau to Waikato Hospital in Aotearoa New Zealand. Int J Environ Res Public Health. 2020;17(23):8833. doi: 10.3390/ijerph17238833.
11. Mohr NM, Wong TS, Faine B, et al. Discordance between patient and clinician experiences and priorities in rural interhospital transfer: a mixed methods study. J Rural Health. 2016;32(1):25-34. doi: 10.1111/jrh.12125.
12. Dicker B, Garrett N, Howie G, et al. Association between direct transport to a cardiac arrest centre and survival following out-of-hospital cardiac arrest: A propensity-matched Aotearoa New Zealand study. Resusc Plus. 2024;18:100625. doi: 10.1016/j.resplu.2024.100625.
13. Curtis E. Indigenous positioning in health research: the importance of Kaupapa Māori theory-informed practice. AlterNative. 2016;12(4):396-410. doi: 10.20507/AlterNative.2016.12.4.5.
14. Lacey C, Huria T, Beckert L, et al. The Hui Process: a framework to enhance the doctor-patient relationship with Māori. N Z Med J. 2011;124(1347):72-78.
15. Thomas DR. A general inductive approach for analyzing qualitative evaluation data. Am J Eval. 2006;27(2):237-46. doi: 10.1177/1098214005283748.
16. Brewer KM, Taueetia-Su'a T, Hanchard S, et al. Māori and Pacific families' experiences and perspectives of cardiovascular care; A qualitative study. Aust N Z J Public Health. 2024;48(3):100149. doi: 10.1016/j.anzjph.2024.100149.
17. Penney S, Dicker B, Harwood M. Cultural safety in paramedic practice: experiences of Māori and their whānau who have received acute pre-hospital care for cardiac symptoms from paramedics. J Prim Health Care. 2024;16(2):180-89. doi: 10.1071/HC24010.
18. Pene BJ, Aspinall C, Wilson D, et al. Indigenous Māori experiences of fundamental care delivery in an acute inpatient setting: A qualitative analysis of feedback survey data. J Clin Nurs. 2022;31(21-22):3200-12. doi: 10.1111/jocn.16158.
19. Yeo JW, Ng ZHC, Goh AXC, et al. Impact of cardiac arrest centers on the survival of patients with nontraumatic out-of-hospital cardiac arrest: a systematic review and meta-analysis. J Am Heart Assoc. 2022;11(1):e023806. doi: 10.1161/JAHA.121.023806.
20. Yeung J, Matsuyama T, Bray J, et al. Does care at a cardiac arrest centre improve outcome after out-of-hospital cardiac arrest?—A systematic review. Resuscitation. 2019;137:102-15. doi: 10.1016/j.resuscitation.2019.02.006.
21. Lipe D, Giwa A, Caputo ND, et al. Do out-of-hospital cardiac arrest patients have increased chances of survival when transported to a cardiac resuscitation center? A systematic review and meta-analysis. J Am Heart Assoc. 2018;7(23):e011079. doi: 10.1161/JAHA.118.011079.