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COMMENTARY

Obtaining feedback from patients and their family in the emergency department



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ABSTRACT

Obtaining feedback from the patient and their family members regarding their experience of the care they received in the emergency department is important. This provides an extremely valuable opportunity for healthcare professionals to assess the quality of care and serves to highlight any areas of weakness or strength in the care experience. Through a synthesis of available literature, this article describes the challenges in measuring such an experience especially in emergency departments in Africa, and outlines tools that are currently available in literature to measure the patient and family experience and or satisfaction. Implementation considerations are outlined in order to provide recommendations for emergency department healthcare professionals wanting to undertake such assessments.

Introduction

Obtaining feedback about experiences and or satisfaction with care from the patient and their family members (and or significant others) who present with them in the emergency department (ED) is important. This provides an extremely valuable opportunity for healthcare professionals (HCPs) to assess the quality of care and serves to highlight any areas of weakness in the care experience. It can also provide an opportunity to regularly monitor performance in the ED and provide benchmarking with other hospital departments as well as other organisations [1–3].

Family members are unique in the ED as they support their sick relatives, provide relevant information to assist in diagnosis and also makes decision on behalf of the sick relatives. While playing these roles, families engage with HCPs, including specialists directly involved in the care of their loved ones, and they utilize hospital facilities and structures in the process [4]. The patients and their family's level of satisfaction with the overall services of the hospital are usually determined by their first exposure to the facility and as their entry point is often the ED, such perceptions are greatly influenced by the care they received in the ED. Sonis, Aaronson, Lee et al. [5] explained that the most common drivers of the ED patient experience involve communication, wait times, staff empathy and compassion. This was supported by Bull, Latimer, Crilly et al. [6] who highlighted the following two important themes described by patients regarding their ED experience namely; relationships between ED patients and the HCPs and the time spent in the ED environment.

There is a growing interest among HCPs to measure patients and family's experience of the ED in order to establish their expectations and to plan to address them [7,8]. Evidence internationally suggests that health care is more efficient and effective when the experiences of patients and their family members are determined in order to establish their expectations [7,9–11]. The outcome of patient and family experiences and or satisfaction with healthcare staff and services, infrastructure and the ED environment has been utilized as an indicator for performance management, quality of service and to inform choices among healthcare providers globally [10,12–14].

In addition, measuring patients and family's experience and satisfaction can guide HCPs in identifying patient and family's challenges and planning interventions suited to their needs; the outcome of which could also be utilized as an indicator to assess clinical quality and safety in health care [15]. Outcomes of patient satisfaction measurement continues to play significant role as a critical indicator of healthcare quality; vital in order to stay competitive in the healthcare market [16]. Patient and their family can provide unique insights into the quality of care which can then be used for improvement, however, tools that HCPs can use to measure this must be valid and reliable, cost-effective, acceptable and have educational impact for organisations learning and decision making purposes [17]. Providing appropriate tools for the HCPs to use in order to provide a measurement of this experience is an essential aspect of care for patients and their family members [18,19].

However, in the context of African EDs, scarcity of healthcare resources, shortage of experienced HCPs, and overcrowding, might impact

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the family's experience of the HCPs working in the ED, the ED structures and processes, therefore impacting negatively on their satisfaction with care. On the other hand, HCPs might not be able to measure patients and family's experience of the ED. Not being able to do so might hinder receipt of valuable feedback, which is essential for improved patient outcomes.

Tools currently used to measure patient and family experience in the ED

A number of tools measuring patients and family member's experience and/or satisfaction with the care they received in the ED have been developed and used globally. Recently conducted scoping reviews to identify and examine such tools used in the ED [20,21] found nine (9) surveys used globally to measure adult patients experience and three (3) for family members. Furthermore, measuring patient and family member's experience of the ED is relatively new compared to that of the intensive care unit (ICU) which has been explored extensively [22]. For that reason, there is a limited number of tools that are available in literature. Tables 1 and 2 presents an overview of each of these tools including the domains or concepts covered in the tools, number of question items, the mode and timing of administration. This information may assist African ED HCPs in identifying tool(s) to use in their ED. However, the choice or selection of tools to use in ones ED depend largely on the context, population and the available resources [23].

Tools relevant to the African context

Before selecting the right tool to measure experiences of patient and family's in an African ED, it is essential that researchers should consider selecting a culturally appropriate and applicable tool, ideally the one that has already been used in an African context. Such a tool should be comprehensive, covering lots of domains, requiring minimal time to complete so that it is quick to use in a busy ED, with the question items which are easy to understand, and can be easily completed.

Although several tools were highlighted in literature, there are two (one for patient and the other for the family) which appears to possibly be best suited to the African setting namely; National Health Service Trust Questionnaire (NHS) and Critical Care for Family Needs Inventory – Emergency Department (CCFNI-ED) questionnaire. For the patient tool, the NHS Trust Questionnaire has been used widely in European countries among different racial and ethnic groups. The tool is comprehensive and useful as it covers a wide range of domains and it can be utilised in low-middle income countries, including those in Africa. However, researchers may need to translate the tool in order to best suit their context. The CCFNI-ED tool focused on four essential domains relevant to families' experiences in the ED, including; communication with family, family member participation in the ED care, comfort and support. This tool has been used extensively in measuring family's experiences of the ED in Africa.

What makes measuring patient and family experience difficult in the ED?

Whilst it is acknowledged that measuring patient and family member's experience of the ED is important, there are a number of challenges in doing so, especially within Africa. For example, there is no widely accepted definition of patient experience or satisfaction with care and this appears to limit the effective measurement of patient experiences, and it also raised concerns around the foundation on which to examine quality care [6]. Differences in healthcare settings, socio-cultural and religious beliefs appear to be some of the factors impacting on how patient and family experiences are being conceptualized. Hence the need to conduct comprehensive investigations that could guide standardized definition of patient and family experience in the ED [8,24].

Terminology confusion

It is important to first be clear regarding exactly what is being measured. There are many overlapping concepts such as satisfaction, perceptions, needs, participation and preferences which may be used synonymously with that of patients and family experience [20]. Most of these terms are not well defined, for example, asking a patient as to whether or not he received a pain medication at the right time as opposed to asking patients to rate their satisfaction with the medicine. The focus should rather be on whether they have experienced the care processes, rather than on rating specific aspects of care or treatment [17]. These concepts therefore need to be clearly defined and then used to develop a valid, reliable, acceptable and relevant tools to measure patients' and family's experience in the hospital setting [25].

Ganong [26] highlighted challenges around family measurements including the ambiguous conceptualization of the construct "family". Not clearly defining what family is can create difficulties when deciding on who to approach to measure family experience of the ED as staff may define it differently from each other and then respond based on their own definition. The definition of family within Africa is seen as a system bound by biological (genetic), legal (adoption, guardianship and marriage), and sociological (friends and neighbours) ties [27,28]. Inaccurate understanding of units of measurement i.e. who will provide data could potentially create problems as all members of the family might be involved. It should be made very clear when considering the population of interest if the feedback is required from individual family members or the family group (20, 21).

Challenging ED environment

There are a number of challenges in measuring patient and family's experience/satisfaction of care in an African ED. Often very limited space (limited resources) and too many patients, including lack of staff available to measure patient and family's experiences. Most patients often expect to receive care urgently and then be discharged home and their families can also be impatient to wait further to complete a questionnaire [29]. The ED environment requires highly competent staff to provide time sensitive care for often seriously ill patients, further complicated by rapid patient turnover [8]. This makes the ED a difficult place to conduct any type of research or for the handing out of questionnaires. Such a setting also presents additional ethical challenges [30]; asking a patient and their family members to complete a survey to assess the care they received when they are anxious, exhausted or frustrated can be problematic. Language barriers (patients and their relatives may speak different languages or dialects than the healthcare providers. This can make it difficult to accurately assess their satisfaction levels, cultural differences (patients and their relatives may have different cultural expectations and preferences for healthcare than their healthcare providers, which can impact their satisfaction levels), low health literacy (patients and their relatives may have low health literacy levels), which can make it difficult for them to understand their diagnosis, treatment options, and the care provided to them in the ED) [29].

When to administer the tool?

Another consideration is that of timing - when to administer the instrument to evaluate the patient or family experience? Should it be done immediately upon discharge from the ED which has been found to be effective in capturing the unique experiences of patients and family members [21] or a mailed questionnaire or telephonic interview conducted several days or weeks post-discharge? The latter could be problematic as accurate recollection of events might be influenced by events following the ED experience e.g. death of a loved one [1]. In Africa, challenges around literacy, lack of access to postal services, hard to reach population in rural areas, limited access to telephonic devices could hinder measuring experiences or satisfaction in a timely manner. Although

 Table 1

 Patient experience/satisfaction tools for the ED.

Instrument	Authors	Country of origin	Domains covered	No. of items	Mode of administration	Timing of administration
Accident and Emergency Department Questionnaire (AEDQ)	Bos et al. 2012	United Kingdom	Arrival at the emergency department; Waiting Doctors and nurses Your care and treatment Tests Pain Hospital environment and facilities Leaving the emergency department Overall About you Any other comments	50 items	Mailed questionnaire	After ED visit -3 months post discharge
Brief Emergency Department Patient Satisfaction Scale (BEDPSS)	Atari, M & Atari, M, 2015.	Iran	 Emergency department staff Emergency department environment Physician care satisfaction General patient satisfaction Patient's family's satisfaction 	24 items	Self-completed questionnaire	At the ED after discharge
Emergency Department Patient Experience of Care (EDPEC) consists of three survey instruments: Discharged to Community Admitted Stand Alone Admitted HCAHPS Add-on	Weinick, et al. 2014	United States of America	Getting Timely care Communication with Patients about their medicines How well the ED Doctors & Nurses communicate with patients Communication with patients prior to their release	35 items 29 items 10 items	Combination of telephonic and mailed questionnaire.	At home post-discharge to the community or at the hospital following hospitalization.
Consumer Emergency Care Satisfaction Scale (CECSS)	Davis, B, & Duffy, E 1999	Australia	Caring andTeaching subscales	17 items + 1 open-ended interview question	Self-completed questionnaire. The interview question is completed by a research assistant. Mailed questionnaire	Prior to leaving ED
Consumer Quality Index for the Accident & Emergency Department Questionnaire (CQI A&E)	Bos et al. 2015	The Netherlands	Information before treatment Timeliness Attitude of health-care professionals Professionalism of received care Information during treatment Environment and facilities Discharge management	78 items		1 month after ED visit.
Emergency Department Consumer Assessment of Healthcare Providers and Systems (ED-CAHPS)	Abass, G et al. 2021	Saudi-Arabia	Arrival Waiting time, and urgency of treatment Medications Pain management Follow-ups on tests/results Interpreter services Nursing care Doctor care Discharge Overall rating Likelihood to recommend	23 items	Telephonic questionnaire	After discharge from the ED
Emergency Department Patient Satisfaction Assessment (EDPSA)	Mohammadi- Sardo, M.R & Salehi, S	Iran	 Tangibles Reliability Responsiveness Assurance Empathy	24 items + 1 open-ended question	Self-completed questionnaire	At ED - 7 days post-discharge

(continued on next page)

Table 1 (continued)

Instrument	Authors	Country of origin	Domains covered	No. of items	Mode of administration	Timing of administration
Patient Satisfaction of Emergency Department Survey by Omidvari & Tajik	Zohrevandi, B & Tajik, H 2014	Iran	 Physical comfort and residential aspects Physicians care Nurse care Behavioral aspects Waiting time for service presentation 	37 items	Self-completed questionnaire	After discharge
Patient Experience of Care Survey	Chiu, H et al. 2014	Canada	 Arrival in the ED Waiting time Doctors & Nurses Your care & Treatment Leaving the ED Overall experience 	9 items + 1 open-ended question	Self-completed & mailed questionnaire and the interview question is completed by a research assistant	Immediately upon discharge from the ED and at home
Press Ganey Questionnaire (PGQ)	Soleimanpour, H 2011	Iran	 Identification and waiting time Registration process, physical comfort and nursing care Physician care Overall satisfaction with the ED 	30 items	Self-completed questionnaire	At home post discharge

^{*}Oyegbile and Brysiewicz [21].

Table 2Family experience/satisfaction tools for the ED.

Instrument	Associated paper/authors	Country of origin	Domains covered	No of question items	Mode of administration	Timing of administration
Bobrovitz et al. questionnaire	Bobrovitz, et.al. 2012	Canada	Timeliness Sill and qualities of caregivers Safety Equality Information and communication Coordinated and comprehensive Patient- and family-centered care End-of-life care [family survey only] Overall satisfaction	Acute care questionnaire = 46 items Post-acute care = 27 items	Mailed and telephonic questionnaire	1–7 months post-discharge from the ED
Critical Care Family Need Inventory- Emergency Department (CCFNI-ED)	Redley, B et al. 2003; 2004; 2019. Hsiao, P et al. 2017 Sucu-Dag, et al. 2017	Australia, Taiwan & South Africa	 Communication with family Family member participation in the ED care Comfort Support 	40 items	Mailed questionnaire	Shortly after discharge of patien from the ED.

^{*}Oyegbile and Brysiewicz [47].

the ED, especially in Africa, is a fast-paced, stressed environment where healthcare actions are delivered swiftly in the midst of compelling priorities, and this may inform the way such surveys are administered. However, patient and family must not be made to feel rushed, pressured or compelled as doing so might impact negatively on the quality of insights they might provide [17].

Who to administer the tool?

It is important to also establish who has the responsibility for the administration, collection and analysis of such feedback [31]. Is this for the HCPs or administrative staff? In a study on patient satisfaction conducted in the United States by Sobel, Bates, Ng et al. [32] the ED doctors argue that their duty was to provide care and not to focus on the patient as customers. Inter/multidisciplinary specialties and the wealth of experience available among HCPs and allied healthcare workers in the ED should be harnessed to select relevant tool(s), however, a lack of multidisciplinary collaboration might be a barrier to utiliza-

tion of research output [33,34]. Severe resource constraints, including scarcity of HCPs, research capacity gaps among HCPs, dearth of research mentors, and minimal support for research by healthcare organizations are limitations to measuring patient and family's experience of the ED [35].

Implementation considerations

Before embarking on the evaluation of patient and family members experience and or satisfaction in the ED there are important aspects to consider. The decision to use a tool is a rigorous one that entails collaboration of multidisciplinary team of professionals working in the ED. Team members might consider several issues around whether the domains in the tool is comprehensive enough, the context where the study will be conducted and resources available in the ED before reaching a consensus on a suitable tool.

Choosing the right tool to use

To guide the HCPs in selecting the right instrument for the right purpose, Beattie, Murphy, Atherton et al. [17] proposed that tools should be scrutinized by utilizing the quality matrix for it to be considered relevant in real-world practice. The quality matrix consists of; cost efficiency, acceptance and educational impact. This means that the cost of developing and administering the tool should be considered before selecting, not forgetting the need for translation of the tool where necessary. The HCPs needs to know the cost of the tool administration, engaging assistants and or experts if necessary, and the cost of compiling and analyzing the results for translation of the information into practice. The HCPs can assess for acceptance of the tool by establishing whether the participants understand the question items and are willing to take time to complete it. The ease of scoring the tool and utilizing the results for intended purposes should be considered as well.

In addition, the HCPs must be aware of the socioeconomic element of the country where the tool was developed and if the tool has been tested in a similar context. For instance, tools developed in high-income countries (HICs) may not be suitable for use in LMICs. A relevant tool must be adaptable to diverse cultural and ethnic clusters of patients and their family, otherwise giving and receiving feedback might be interpreted differently [36]. Cultural and religious beliefs, 'meaning' and interpretation of sickness and different perceptions of needs and experiences informs why patient and family may experience the ED differently [36,37]. In addition, in order for the tools to meet the acceptability criteria, clinicians may need to adapt the tool to the socio-cultural context of the study setting [24].

Domains of interest

While some tools are more comprehensive investigating domains/areas of interest spanning the whole patient journey from entering the ED until exiting the hospital [1], some tools focused on a few such as on accessing information/communication, interpreter services, discharge procedures and processes, staffs responsiveness, assurance, empathy, and likelihood of patient to recommend the hospital to intending users [38]. When considering which are the domains of interest to focus on measuring, it is suggested that the HCPs must pay attention to domains that addresses the concerns, needs and interest of the ED so that the outcome can inform policy and quality improvement [39]. It is also important to consider domains of importance to all the HCPs i.e. medicine, nursing and pre-hospital care. It then means that in an African ED certain cultural issues might affect the suitability, acceptability and applicability of some domains in the tool.

Timing of administration

Although there is no consensus regarding an appropriate time to administer a tool in the ED, however, patients health and well-being must be prioritized. The peculiar chaotic nature of the ED, fewer staff to provide care might mean that HCPs may not be available to administer the survey before the patients leave the ED, patients and families might also be in haste to be discharged home from the hospital or transferred to the wards. Rapid patient turnover common in most EDs in Africa and resource constraints in most healthcare centres might not permit survey administration in the ED [24]. On the other hand, administering the survey when the patient is disorientated and is still receiving acute care could impact the process of obtaining an informed consent and this could be interpreted as unethical [31]. Measuring patients or family experience after several weeks or months, can make recollection of events difficult, hence response bias [40].

Mode of administration

When it comes to administering tools to patient and their family members in Africa EDs, evidence highlights that lengthy survey might discourage participation since patient and their families might be exhausted following care at the ED [29]. It becomes extremely difficult for family members to participate following the death of their loved ones or when the prognosis seems poor [41]. And differences in linguistics might impact participation and low literacy level might increase the cost of conducting a study since participants might require assistance from an interpreter.

Decision around the mode of administration needs to be made. Is it a pencil and paper questionnaire, an online survey, or a telephonic or mailed questionnaire? How much time is required to complete a questionnaire? Is it self-administered or is a research assistant needed to read the questions out loud? How many minutes will it take to complete a questionnaire? Should it be translated to a local or preferred language? These are few of the important questions or concerns that ED HCPs should think about when deciding on using a particular tool.

Recent experiences with COVID-19 and the need to observe social distancing has challenged the conventional ways of conducting research and have compelled researchers to collect information virtually [42,43]. In the context of Africa EDs administering surveys virtually appears reliable and cost-effective especially because access to smartphones and internet activity has increased exponentially [44]. On the contrary, the HCPs should consider an appropriate mode of administering a survey for patient and family members who are educationally disadvantaged, living in areas with limited internet connectivity and who may not be able to afford data and device necessary to complete an online survey [45].

Furthermore, HCPs should consider the appropriateness of administering the tool for both patients and family at the same time or should it be administered at different times? Studies highlighted that engaging patients and their family members as active partners in care might improve their experience of care, promotes patient activation and leads to improved outcomes [46]. However, it is suggested that each case should be considered on its own merit especially if administering a tool might impact service delivery.

Implications for practice and conclusion

Obtaining feedback from patient and their family in the ED is essential however this article highlights the challenges associated with doing so especially in an African context. The type of the tool, timing and mode of administration, as well as the quality matrix of the tools have been documented in this article in order to assist ED HCPs in identifying relevant tool(s) to consider using in their ED, especially those in Africa. Implementation considerations are also outlined in order to provide practical recommendations for ED HCPs undertaking such assessments in the hope that such practices become common place in EDs across Africa.

Author's contribution

Authors contributed as follows to the conception or design of the work; the acquisition, analysis, or interpretation of data for the work; and drafting the work or revising it critically for important intellectual content: YO contributed 50% and PB contributed 50% each. All authors approved the version to be published and agreed to be accountable for all aspects of the work.

Declaration of Competing Interest

The authors declare no conflict of interest.

Dissemination of results

No result to disseminate since this is a commentary article

References

- [1] Chiu H, Batara N, Stenstrom R. Feasibility of using emergency department patient experience surveys as a proxy for equity of care. Pat Exper J 2014;1(2):78–86. https://pxiournal.org/journal/vol1/iss2/13.
- [2] Coniglio R, McGraw C, Archuleta M. A multicenter performance improvement program uses rural trauma filters for benchmarking: an evaluation of the findings. J Trauma Nurs 2018:25(2):139–45. doi:10.1097/JTN.000000000000337.
- [3] Dongelmans DA, Pilcher D, Beane A. Linking of global intensive care (LOGIC): an international benchmarking in critical care initiative. J Crit Care 2020;60:305–10. doi:10.1016/j.icrc.2020.08.031.
- [4] Soontorn T, Pongtriang P, Songwathana P. Thai family caregivers' experiences helping dependent elders during medical emergencies: a qualitative study. Australas Emerg Care 2020;23(2):71–6. doi:10.1016/j.auec.2019.11.002.
- [5] Sonis JD, Aaronson EL, Lee RY. Emergency department patient experience: a systematic review of the literature. J Pat Exper 2018;5(2):101–6. doi:10.1177/2374373517731359.
- [6] Bull C, Latimer S, Crilly J. A systematic mixed studies review of patient experiences in the ED. Emerg Med J 2021;38:643–9. doi:10.1136/emermed-2020-210634.
- [7] LaVela SL, Gallan AS. Evaluation and measurement of patient experience. Pat Exper J 2014;1(1):28–36. http://pxjournal.org/journal/vol1/iss1/5.
- [8] Sonis JD, White BA. Optimizing patient experience in the emergency department. Emerg Med Clin North Am 2020;38:705–13. doi:10.1016/j.emc.2020.04.008.
- [9] Molalign Takele G, Abreha Weldesenbet N, Girmay N. Assessment patient satisfaction towards emergency medical care and its determinants at Ayder comprehensive specialized hospital, Mekelle, Northern Ethiopia. PLoS One 2021;16(1):1–10. doi:10.1371/journal.pone.0243764.
- [10] Abass G, Asery A, Al Badr A. Patient satisfaction with the emergency department services at an academic teaching hospital. J Fam Med Prim Care 2021;10(4):1718– 25. doi:10.4103/jfmpc.jfmpc_8_20.
- [11] Natesan P., Hadid D. and Harb Y.A., Comparing patients and families perceptions of satisfaction and predictors of overall satisfaction in the emergency department. 2019
- [12] Al-Wathinani A, Aldawsari S, Alhallaf M. Assessment of Emergency Department Satisfaction Level in Saudi Arabia General Hospital. Saudi J Anaesth 2022;16(1):4–9. doi:10.4103/sja.sja 285 21.
- [13] Deji-Dada OO, Dada SA, Ogunlusi JD. Patients' satisfaction with emergency care services in a University Teaching Hospital in South-West, Nigeria. Afr J Emerg Med 2021;11(2):321–4. doi:10.1016/j.afjem.2021.03.015.
- [14] Price RA, Elliott MN, Zaslavsky AM. Examining the role of patient experience surveys in measuring health care quality. Med Care Res Rev 2014;71(5):522-4. doi:10.1177/1077558714541480.
- [15] Ahmed F, Burt J, Roland M. Measuring patient experience: concepts and Methods. Patient 2014;7(3):235–41. doi:10.1007/s40271-014-0060-5.
- [16] Cypress BS. The emergency department: experiences of patients, families, and their nurses. Adv Emerg Nurs J 2014;36(2):164–76. doi:10.1097/TME.0000000000000017.
- [17] Beattie M, Murphy D, J, Atherton I. Instruments to measure patient experience of healthcare quality in hospitals: a systematic review. BioMed Central 2015;4(97):1– 21. doi:10.1186/s13643-015-0089-0.
- [18] Messina G, Vencia F, Mecheroni S. Factors affecting patient satisfaction with emergency department care: an Italian Rural Hospital. Glob J Health Sci 2015;7(4):30–9. doi:10.5539/gjhs.v7n4p30.
- [19] Sawin KJ. Measurement in family nursing: established instruments and new directions. J Fam Nurs 2016;22(3):287–97. doi:10.1177/1074840716656038.
- [20] Oyegbile YO, Brysiewicz P. Tools to measure families experience in the emergency department: a scoping review. Int Emer Nurs J 2021;58:1–8. doi:10.1016/j.ienj.2021.101038.
- [21] Oyegbile Y, Brysiewicz P. Measuring patient experience in the emergency department: a scoping review. Afr J Emerg Med 2020;10:249–55. doi:10.1016/j.afjem.2020.07.005.
- [22] Kelly FE, Fong K, Hirsch N. Intensive care medicine is 60 years old: the history and future of the intensive care unit. Clin Med 2014;14(4):376–9.
- [23] van den Broek JM, Brunsveld-Reinders AH, Zedlitz AM. Questionnaires on family satisfaction in the adult ICU: a systematic review including psychometric properties. Crit Care Med 2015;43(8):1731–44.

- [24] Atari M, Atari M. Brief emergency department patient satisfaction scale (BEPSS); development of a new practical instrument. Emergency 2015;3(3):103–8.
- [25] Carman KL, Dardess P, Maurer M. Patient and family engagement: a framework for understanding the elements and developing interventions and policies. Health Aff 2013;2:223–31. doi:10.1377/hlthaff.2012.1133.
- [26] Ganong LH. Selecting family measurements. J Fam Nurs 2003;9(2):184–206. doi:10.1177/1074840703251990.
- [27] Erlingsson CL, Brysiewicz P. Swedish and South African nursing students' descriptions of family. J Nurs Scholarsh 2015;00(0):1–9. doi:10.1111/jnu.12133.
- [28] Makiwane M, Kaunda C. Families and inclusive societies in Africa. 2018 International day of families, United Nations. New York, USSouth Africa: Human Sciences Research Council: 2018.
- [29] Nel E, Rich E, Morojele N. Data collection challenges experienced while conducting the international alcohol control study (IAC) in Tshwane, South Africa. Drugs: Educ, Prevent Policy 2017;24(5):376–83
- [30] O'Dell T., Zalin A. and Vaughan L. The Challenges of Conducting Research on the Acute Medical Unit Acute Medicine 2016;15(4):212–4.
- [31] Good AMT, Driscoll P. Clinical research in emergency medicine: putting it together. Res Ser 2002:242–3.
- [32] Sobel J, Bates J, Ng V. Effect of real-time surveys on patient satisfaction scores in the emergency department, 2019. Hindawi: Education Research International; 2019. p. 1–5. doi:10.1155/2019/6132698.
- [33] Short A, Holdgate A, Ahern N. Enhancing research interest and collaboration in the interdisciplinary context of emergency care. J Interprof Care 2009;23(2):156–68. doi:10.1080/13561820802675566.
- [34] De Von HA, Patmon FL, Rosenfeld AG. Implementing clinical research in the high acuity setting of the emergency department. J Emerg Nurs 2013;39(1):6–12. doi:10.1016/j.jen.2012.08.012.
- [35] Ameh PO, McGuire CM, Van Waes A. Research activity, facilitators and barriers amongst trainee and earlycareer family physicians in sub-Saharan Africa: a cross-sectional survey. Afr J Prm Health Care Fam Med 2022;14(1):a3367. doi:10.4102/phcfm.v14i1.3367.
- [36] Redley, Phiri LM, Heyns T. Family needs during critical illness in the Emergency Department: a retrospective factor analysis of data from three countries. J Clin Nurs 2019. doi:10.1111/jocn.14857.
- [37] Sucu Dağ G, Dicle A, Firat MZ. Psychometric properties of the critical care family needs inventory-emergency department. Appl Nurs Res 2017;33:113–20. doi:10.1016/j.apnr.2016.11.001.
- [38] Bos N, Sturms LM, Stellato RK. The Consumer Quality Index in an accident and emergency department: internal consistency, validity and discriminative capacity. Health Expect 2015;18(5):1426–38. doi:10.1111/hex.12123.
- [39] Thayaparan AJ, Mahdi E. The Patient Satisfaction Questionnaire Short Form (PSQ-18) as an adaptable, reliable, and validated tool for use in various settings. Med Educ Online 2013;23(18):1–3. doi:10.3402/meo.v18i0.21747.
- [40] Redley, Beanland C. Revising the critical care family needs inventory for the emergency department. J Adv Nurs 2004;45(1):95–104. doi:10.1046/j.1365-2648.2003.02865.x.
- [41] Sucu Dağ G, Dicle A, Firat MZ. Psychometric properties of the critical care family needs inventory-emergency department. Appl Nurs Res 2016;33:113–20. doi:10.1016/j.apnr.2016.11.001.
- [42] Hensen B, Mackworth-Young CRS, Simwinga M. Remote data collection for public health research in a COVID-19 era: ethical implications, challenges and opportunities. Health Policy Plan 2021;36(3):360–8. doi:10.1093/heapol/czaa158.
- [43] Andrade C. The limitations of online surveys. Indian J Psychol Med 2020;42(6):575–6. doi:10.1177/0253717620957496.
- [44] African Development Bank Group Federal republic of nigeria country strategy paper. Abuja: African Development Bank Group; 2013.
- [45] Jarvis M.A. and Oyegbile Y.O. and Brysiewicz P. COVID-19, the family unfriendly virus: is the family's experience of the ED relevant within the confines of a pandemic? International emergency nursing. 2021:100960. https://doi.org/10.1016/j.ienj.2020.100960
- [46] Joshi M, Erb N, Zhang S. Leading health care transformation: a primer for clinical leaders. Boca Raton, FL: CRC Press; 2016.
- [47] Oyegbile Y, Brysiewicz P. Tools to measure families experience in the emergency department: a scoping review. Int Emerg Nurs 2021;58. doi:10.1016/j.ienj.2021.101038.