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Data gathering and utilization: humanitarian targeting and ethical issues in northeastern Nigeria

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Abstract

Introduction There are lapses in Nigeria's data ecosystems with the consequences of imprecise and inaccurate data on humanitarian crises limiting accurate interventions. Therefore, we examined the data targeting processes in the humanitarian sector of Northeast Nigeria and the ethical concerns that arise when such data is collected and used to advance understanding and improve humanitarian protection systems.

Methods The fieldwork was done in two phases in Maiduguri Borno, North-East Nigeria, between 2021 and 2022. This period was selected because it was the climax of IDP camps in the Northeastern part of the country. Maiduguri was selected for the study because it is the capital of Borno state which is the epicenter of insurgency and internal displacements in Nigeria. Hence, a lot of the most vibrant IDP camps in Nigeria were in Maiduguri for care and security reasons. Fifty in-depth interviews were conducted among the displaced persons across five camps. We also interviewed twenty stakeholders and practitioners working with IDPs to understand Nigeria's data-based humanitarian contexts of internal displacement. The interviews were tape-recorded and transcribed verbatim by a language expert. The data were coded, and content analyzed to provide context and explore significant operational and ethical issues in data-driven humanitarian protection.

Results There are discrepancies in the definition of vulnerability in data gathering, putting into question how targeting is carried out to identify vulnerable people and its implications for exclusion. Different data banks and reliability issues across institutions and actors make room for a multiplicity of data and problematic synergy relative to data and ethics. Inconsistent ethical systems guide data gathering and utilization in IDP camps; for instance, there are ineffective norms of recording and securing informed consent during data gathering. States, partners, and IDP camps confront debilitating capacity gaps and equipment deficits that make updated data gathering, storing, retrieval, and utilization. Paper and digital data storage processes were often used with restricted access to only a few key stakeholders. There is vast data expropriation without standard recourse to justice and beneficence as ethical procedures in the humanitarian data space of northeastern Nigeria as a microcosm of Sub-Saharan African realities.

Conclusion There are enormous implications for effective and efficient targeting processes and outcomes, strategic inclusion, and ethical practices in conflict management, humanitarian interventions, and internal displacement in sub-Saharan Africa.

Keywords Humanitarian targeting, Humanitarian data gathering and utilization, Data ethics, Northeastern Nigeria

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Introduction

Data is central to practical understanding and improved humanitarian protection systems (International Committee of the Red Cross [ICRC], 2016). However, indicators suggest that there are lapses in the data ecosystems in Nigeria, with its attending consequences of imprecise and inaccurate data on humanitarian crises limiting the interventions (Lopez et al. 2020). This is especially important for the northeastern part of Nigeria, known for significant adverse activities of insurgents and terrorists, including Boko Hara and the Islamic State West Africa Province (ISWAP), leading to deaths, multiple displacements, loss of livelihood and supportive existential systems (United Nations High Commissioner for Refugees [UNCHR], 2020; Global Report on Internal Displacement [GRID], 2021).

The focus of many humanitarian and diplomatic interventions in Nigeria has been on immediate livelihood issues such as feeding, medical care, clothing, shelter, and security (Shehu and Abba 2020), with personnel and assets to aid the displaced people in all affected areas (National Emergency Management Agency [NEMA], 2016). However, the humanitarian situation is rapidly changing towards resettlement, rehabilitation, and reintegration of internally displaced persons (Shehu and Abba 2020). This current approach is a multi-stakeholder, multi-disciplinary, and cost-intensive initiative that requires the buy-in and support of all establishments, people, organizations, states, and institutions. Key stakeholders and researchers from the supply and demand sides have stressed the need to communicate robust data ecosystems protocols because of the vulnerabilities of some IDPs subjected to governments and non-state actors' coercion or harassment (LeVan, Hassan, Isumonah, Kwaja, Adama, Momale, Nwankwor, Okenyodo 2018). Hence, this shift would require a critical assessment of the data ecosystem protocols in the context of humanitarianism and displacement in Nigeria.

Efforts to address the lapses in the Internally Displaced People (IDP) data ecosystem in Nigeria include implementing the International Organization for Migration's (IOM) Displacement Tracking Matrix (DTM) in collaboration with NEMA to collect and disseminate data on IDPs. Also, the Ministry of Women Affairs and Social Development, in partnership with United Nations Children's Fund (UNICEF) embarked on creating a standardized method to register and manage cases of children coming into camps who are separated and unaccompanied (UNICEF, 2020). In addition, committees comprised of individuals from the sectors and the IDP groups also oversee camp administration, data collection, and dissemination. All these efforts were to ensure compliance with the data laws within the Economic Community of

West African State (ECOWAS) and international law standards, the Nigerian Constitution, and the Supplementary Act on Personal Data Protection when gathering data from IDPs (ECOWAS 2010). It, therefore, becomes imperative to have a practical understanding of the situations in the field beyond documented protocols, guidelines, and standards of national and international organizations in humanitarian and displacement spaces. This is necessary for valuable and objective contributions to knowledge on data, ethics, and humanitarian efforts in the contexts of conflicts, insecurities, and internal displacements in sub-Saharan Africa.

Although humanitarian actors and organizations regularly operate in disruptive life-threatening conflict situations, challenges to ethical obligations and humanitarian principles are also persistent, far-reaching, and prevalent (Taylor 2016, Broussard, Rubenstein, Robinson, et al. 2019; Shehu and Abba 2020). The assumption that actors achieve efficient and sustainable outcomes using the required information to function optimally can be feasible when humanitarian institutions and structures strengthen data mapping, gathering, processing, storage, and utilization along ethical lines. In addition, unethical data practices and processes violate scientific principles, international best practices, and human rights, leading to social exclusions (Bezuidenhout and Ratti 2021). For example, when data processes that should form the fundamental background of effective and efficient humanitarian interventions in conflict situations are unethical, it questions such interventions. This may also discourage humanitarian assistance provisions and lead to unmet needs in conflict zones (McGowan, Baxter, DuBois, et al. 2020).

Northeast Nigeria is the epicenter of conflict and insurgency in sub-Saharan Africa. Ethical data gathering and utilization practices are needed in such settings for functional and consistent humanitarian targeting and results. However, the challenges confronting data procedures in this region need further elaboration within the context of the humanitarian crisis. Understanding these challenges is crucial for innovating and sustaining required approaches for the efficient and effective deployment of human and material resources in humanitarian contexts. Particularly, the intention of this article is to, partly, map various ethical challenges and issues existing and emergent in the data gathering and utilization ecosystem of Northeastern Nigeria. Unfortunately, without ethical gathering and utilization, humanitarian targeting will be faulty and unsustainable. We distanced ourselves from a priori knowledge of the ethical issues so we can gather objective data and give relevant suggestions. Thus, the research questions this article answers are as follows: what is a vulnerability in the context of humanitarian

crises and internal displacement according to stakeholders? What issues surround internally displaced person's data in the context of ethics relative to targets, storage, access, data multiplicity, data gaps, data verification, and inconsistency?

Method

Study setting

The study design was ethnographic and conducted between March 2021 and January 2022 among IDPs in the formal camp setting and selected stakeholders working with them. Ethnographic design is an approach of qualitative data collection and management that enables researchers immerse themselves in contexts of study to enable a comprehensive understanding of the issues of interest within the cultural milieu of the affected group/s (Akanle and Shadare 2020; Akanle and Adejare 2016). This research design was used because we were sure it will enable us to capture the totality of issues affecting variables of interest in our research questions and contexts. March 2021 to January 2022 was selected because it was the climax of IDP camps in the Northeastern part of the country. Maiduguri was selected for the study because it is the capital of Borno state which is the epicenter of insurgency and internal displacements in Nigeria. Hence, a lot of the most vibrant IDP camps in Nigeria were in Maiduguri for care and security reasons.

Qualitative data was collected through in-depth interviews (IDIs) with selected IDPs in Maiduguri, Borno state camps, and key informant interviews (KIIs) with relevant stakeholders who primarily operate in Northeast Nigeria. IDIs and KIIs are qualitative data collection instruments through which researchers deploy unstructured or semi-structured interview guides to collect primary data from relevant interviewees on the subject matter of research. IDIs and KII participants were purposively selected based on initial and original examination of their lived experiences within the context of conflicts and displacements in Northeastern Nigeria. In relation to our research question, the relevance of lived experiences, availability, and consistency in background and reality is the major inclusion criterion of research participants in our study. Borno state in Northeastern Nigeria was purposively chosen for this study because it is the epicenter of Boko Haram and ISWAP insurgency, insecurity, displacement, and humanitarian crises. Based on data from OCHA (2021), as of 2021, not less than 8.7 million of the 13.1 million population in insurgency areas of North-East Nigeria have been identified to require humanitarian assistance, and these people include 5 million children, 1.74 million women, and 1.4 million disabled. Five IDP camps established between 2014 and 2019 were selected as study sites for this study.

Data collection

Purposive sampling was utilized in selecting IDPs and stakeholders based on the knowledge base, availability, understanding, and willingness to participate across five IDP camps. Data collection for the study was based on research prioritization of the significance of power dynamics in knowledge production processes, sharing, and utilization relative to data ethics and ecology of humanitarian crises in conflict situations. There were extensive engagements (of not less than 11 months) with stakeholders before, during, and after the fieldwork for strategic field entry, exit, and tracking. Research Assistants (RAs) carried out transect walks and mapping activities for effective risk avoidance and excellent data collection processes and outcomes. Our Research Assistants were professionals, including Masters' degree holder, with many years of fieldwork experiences in humanitarian and displacement settings. Fifty in-depth interviews (IDIs) were conducted with IDPs across five IDP camps. The study participants were included in the fieldwork to understand the data-driven processes and how it influences humanitarian interventions. Also, we conducted 20 key informant interviews (KIIs) with stakeholders representing the National Emergency Management Agency (NEMA), Joint Task Force (JTF), State Emergency Management Agency (SEMA), State government and Federal government representatives, community and youth group leaders, youth, women advocacy group, a Non-Governmental Organization and National Identity Management Commission (NIMC). This makes a total of 70 interview sessions.

Data analysis

The tape-recorded seventy in-depth interviews session were translated, transcribed verbatim by an expert, and analyzed with NVIVO software. The study team reviewed and coded the transcripts. The coding was done at different levels based on new themes that emerged during the content analysis of the data. The findings provided context and explored significant operational and ethical issues in data-driven humanitarian protection.

Results and discussion

Description of study participants

The interviewees are between 25 and 53 years and have lived in the IDP camps for 2 to 7 years. Most of the interviewees live in a family setting in the camps. Male IDPs have a higher level of education than females, and some of whom had incomplete primary education. Most of the interviewees are Muslims, while only two are Christians. This is consistent with religious realities on the ground/in context as Islam is the most predominant religion in northeast Nigeria.

The stakeholders reported collaborating with the state government, the Federal government, and other non-governmental organizations/developmental agencies. In addition, some stakeholders have multiple collaborations working with the IDPs. Apart from the community leader and social worker who have fixed work locations at the camps, others carried out their duties moving around different workstations/camps.

Defining vulnerability by stakeholders

The study explored the contextual definitional elements of vulnerability among the stakeholders. This is for efficient humanitarian processes and sustainable impacts. Some stakeholders reported that the economic situation and desperation to meet needs and physiological ability could indicate vulnerability. For example, children and the aged are usually classified as vulnerable because of their physiological makeup. According to an interviewee who captured modal views on this subject:

Most of the vulnerable ones were older adults and children. I used to identify the vulnerability of the people through some indicators, such as when it takes time for IDPs without getting food ... (NIG/SH006/Youth Group representative)

Some participants opine that defining vulnerability should be from a third party or community leaders. The perception is that the community leaders interact at the grassroots and are most familiar with the day-to-day living of the IDPs in the camp. Therefore, the agency staff sometimes depend on the identification of vulnerable people and vulnerability by community leaders as stated by a State Emergency Management (SEMA) Staff who captured consensus:

We used to identify them through their Bulama's (community leaders) inside the camp and their people after pointing to us that they were among the vulnerable people known to them; this is before we can register, collect data and admit them to the camp. (NIG/SH008/SEMA Assistant camp manager)

The irregularities in the classification and identification of vulnerable people by the different stakeholders often lead to a falling through the crack—in which those who need help the most do not get access to appropriate aids. In addition, the IDP interviewees stated that there was unequal treatment in the IDP camps. For example, one of the stakeholders serving as camp manager expresses that while everyone needs to be protected, women and children qualify for more protection. This strongly implies gender and childhood interfaces of vulnerability in the context of humanitarian crises. Women and children often fall through the crack as most vulnerable because of

the discrepancies in the definition of vulnerability that is subjective and lead to unequal treatment. This exclusion and neglect will continue to occur if appropriate data are not collected at the point of registration. Data collection without a deeper probe into the peculiarities of the family structure to identify the most vulnerable may lead to poor needs assessment of IDPs. This has serious implications for effective and efficient humanitarian processes and functional security architectures not only in Nigeria but also in sub-Saharan Africa. If vulnerabilities are unreliable classified, and identified, the adverse outcomes on humanitarian targeting, ethical data ecosystem, and securities will be huge.

Data targets

The needs of the IDPs in the camps can only be met if there is accurate information about them. Data should be well targeted, collected, stored, and used ethically. Although it is a standard practice that there should be inclusion criteria in targeting IDPs and vulnerable people in data collection, there was no reference to a uniform inclusion criterion across the camps, as this was evident in the sessions with the IDPs and stakeholders interviewed. In some cases, stakeholders reported that all categories of people are targeted once they are Nigerians in the IDP camps. For example, one of the stakeholders who captured modal views cited the compulsory registration at the National Identification Management Commission (NIMC), where all Nigerians, including IDPs, are targeted for data collection by an agency of the Federal Government. Other stakeholders mentioned some specific factors as inclusion criteria, such as the vulnerability and age of the IDPs in the targeting process and the purposes of targeting. For example, for organizations such as the Federal Humanitarian Affairs office, attention is paid to infants, women, and the aged, as ascertained by the stakeholders.

Data storage

The stakeholders' responses on data storage suggest that the data gathering, collection, and storing systems differ depending on the organization collecting data. Different data banks and reliability issues across institutions and actors make room for a multiplicity of data, sometimes unsystematic. All the IDP interviewees could not remember the specifics of those who had mined data from/on them. However, they narrated experiences regarding consent and equipment used by the data collectors. Data collection methods included oral interviews, questionnaires, and visualization. For oral interviews, equipment such as recorders, cameras, and iPods were used as stated by some of the participants.

Yes, they only write what we tell them they don't have recorder like this to record. (NIG IDP 011)
They have a record book and big phone (IPOD). I saw them with phones, but I saw how they are doing it. No any book to record. (NIG IDP 006)
They use phone to take our pictures, recorder like this one and also paper to write some things. (NIG IDP 036)

There is no uniformity regarding data storing among the stakeholders, and little is known about the respondents' protection rights and adherence to it, as stated by some stakeholders:

Uhhh... everyone in the humanitarian services has his way of storing his data. The way I will store my data is not how others can do it so everyone has a way of storing data. (NIG/SH003)
We store them on our tablet and forward it to our supervisors and they are the ones that have the access. (NIG/SH007)

Another interviewee reported data is stored on multiple computers and laptops for safekeeping. In addition, storage capacity does not often match the size of data gathered, generated, and utilized.

We used to record data and store it on our computer/laptop. We kept it on two or three different records so that it would not spoil. (NIG/SH004)
When we collect too much data, storing it is also a problem. We are in short of some facilities to keep the data. (NIG/SH008)

The study participants reported dishonesty and corruption regarding data storage, leading to data loss and inaccuracy. Also, data that are not appropriately stored generates more problems when used for the IDP camps projection and forecasting:

There are inconsistencies in data use because of dishonesty and corruption among the people and over the data storage system. No way for now because we don't have access to both storage and dissemination (NIG/SH006)

This section carefully contributes important data and information on the complexities and multiplicities of issues confronting data storage in context and the implications of these for ethical data ecosystem in humanitarian systems especially in Sub-Saharan Africa and, particularly, Nigeria.

Access to data

The study participants highlight the lack of access to their data. Many do not know what happened to the collected

data. There is no feedback mechanism on data collected from the IDPs in the camps. This is against fundamental ethics in the data ecosystem in the context of humanitarian practices and research. For example, interviewees (IDP) observed:

Many people come here to access data. But, in the end, you are not going to see them again. They will take pictures, carry our data, and leave after all (NIG IDP 003).
No, almost all the information I have given have not been useful to me. (NIG2 IDP 002)

This situation has created distrust and aversion to giving consent and information about participation in research and providing crucial and valid information about IDPs and displacements generally in context.

According to stakeholders, those in charge of camps often have access to the data, especially from their bases. However, data are just limited to variables like camps' total population and the number of households, instead of important comprehensive and disaggregated data like socio-economic and demographic data needed for effective planning. Moreover, data on IDPs and camps are often poorly disaggregated, making them little useful for planning and intervention. Sometimes, camp leaders, who are IDPs, only randomly access data perceived to be necessary for them. There is, however, exclusion in data access structures in camps as there is selective access to data gathered. According to a stakeholder:

The leaders among them may have access, but not all IDPs have access. No, they only get some data that are relevant to them. Only the camp officials and the IDP leaders like the camp chairman and secretary may access the data. (NIG/SH008)

In places where data is safely stored, there is also data secrecy in which only a select few have access to this data. At the same time, IDPs were not given access to details about data gathered or complete knowledge of their situation.

Data multiplicity—too much data, too much information

Due to the different agencies collecting and gathering data from internally displaced persons, there are instances of saturation and disjunction in data collection. As a result, the IDPs must continue answering the same questions over a long period and in different contexts, which they perceive burdensome, leading to research fatigue. Furthermore, since participants have not seen tangible and intangible benefits from earlier research where they provided information, they are often disinterested in participating effectively in

another study. Some participants, for instance, opined that there is a possibility that IDPs may alter provided information to accelerate getting necessary aid as observed by a stakeholder:

When they were tired, they would say, you were asking too many questions, and you were not giving them anything. The problem is economic factors. (NIG/SH005)

Continuous data collection can lead to prompt identification of needs in the camp. This is based on the assumption that the needs of IDPs would consistently be reported during data collection. According to a youth representative in the IDP camps:

When too much data is collected, there is no problem because it is through the collection of too much data that one can identify the problem (NIG/SH006)

There is also the unwillingness to provide information by IDPs in camps during the data collection. Stakeholders, however, think this is part of the problem as IDPs do not give honest reports about camp situations, which could portray their case as more grievous than it is or underreport their concerns. This has dire implications for data reliability and validity and makes data unreliable for policies and programs/projects.

Data verification

There are different opinions about the importance of the verification of data gathered. However, the State Emergency Management Agency (SEMA) has a data verification policy by assigning a token to IDPs when they register into camps upon arrival. Although some IDPs misplace their tokens, other means of data verification are used to ensure that appropriate data is recorded. This situation of the missing token is well described. According to a camp manager for example:

From the inception, you must have the people's data by issuing them some token with the numbers they have registered with. For example, on arrival, if there is a missing number and they can't get their numbers, we asked her whether they had their token, or we checked based on their family size; all these we used in verifying data. (NIG/SH007)

Some camps do not have new arrivals, but resident IDPs' details are constantly updated to ensure proper recordings.

Inconsistent ethical system on data collection

Stakeholders get consent from IDPs before data collection. However, this consent is often oral/verbal without proper recording or written consent. In addition to individual consent, some organizations obtain consent to collect data in the IDP camps from state governments and camp managers who approve their entry. In some instances, data collectors do not bother to get consent from the participants/IDPs but rather go ahead with data collection after stating the purpose and approval from higher authorities. This experience of not obtaining individual consent is inappropriate in ethics. According to an IDP:

They are not giving us any consent form to sign; as you come through the state government, they also come through the state government; they get permission from the state government. They will just start the interview. (NIG IDP 003)

I just talk to them verbally and they will agree. From the beginning, I explain the purpose, procedure and aim of the data collection. I also explain to their understanding the importance of the data, telling them that it will help them later. To know the exact number when I later come for implementation. (NIG2/SH007)

In some cases, where consent is required and requested, participation is often voluntary and not compulsory. However, there is also the possibility that there is no means of recording consent, either oral or written; data collectors might skip this process and go ahead with data collection, ignoring this ethical procedure.

Data gaps

There is difficulty in keeping up with the constant changes in camp population, making data accuracy an issue in humanitarian data collection. According to an interviewee/stakeholder:

The gaps are that you can count them correctly today but can't get the same number tomorrow because inside the camps, people live in the camps while some come in daily. Most female IDPs also give birth to children, and some die (NIG/SH003)

There is, therefore, a need to be careful when such incomplete data is used for targeting. Another stakeholder asserted that people who get accurate data are those who come in through the management. Some gaps, however, exist in terms of who collects the data. For example, data collectors are often recruited for a specific period; sometimes, inadequate data collection training creates data gaps. In addition, stakeholders and

officials who train often do not get involved in the data collection process. According to a camp manager:

There must be a gap... for example, data collectors sometimes don't want to work with stakeholders. So stakeholders and officials need to be interviewers (NIG/SH007)

The language barrier is another issue that causes inaccuracy in the data collected from the IDPs. A development agency interviewee succinctly said, "although translators were recruited to gather data in IDP camps, the issue of a language barrier in the camp is obvious. Everybody in this camp has his language, tribe, and culture, and they are different." (NIG/SH003).

Yes, normally, when they don't understand the language that you are speaking, you must look for a third party to interpret. But it is good if they understand the language to communicate directly. (NIG2/SH001)

There are also capacity gaps in personnel and equipment in the camp to facilitate data collection and storage. Equipment such as generators and computers, recorders, phones, and tablets are not usually available and can help improve data collection if provided:

To improve, you must look at the personnel and material sides. The personnel need more training; on the other hand, we need more equipment. We don't have power here we need generators, computers etc. to be improved in data collection (NIG/SH010)

From findings in this sub-section, it is noteworthy that data gaps exist in context and need serious attention and interventions if necessary ethical data practices will ever be instituted in contexts of conflicts and humanitarian challenges in Northeastern Nigeria and identical situations.

Data is an essential tool guiding effective advocacy on humanitarian efforts, crisis management, and insecurity in displacement contexts. Data are used to guide decision-making to improve human conditions and provide needed assistance (Gazi, 2020). However, most countries, including Nigeria, with internally displaced people have the problem of incomplete, inaccurate, and unreliable data. The findings in this article address data gathering and utilization in humanitarian targeting and ethical issues in Northeastern Nigeria. Our results suggest it is important that the data-gathering process be handled better with an improved data system. This is due to the seriousness and sensitiveness of data in humanitarian spaces in sub-Saharan Africa and Nigeria. Data is vital for efficient and sustainable displacement

management that will not leave anyone behind regardless of degrees of vulnerabilities, displacements, and in/security.

Identifying IDPs and those who are vulnerable is a significant issue in targeting. There have been discrepancies in the definition of IDPs which led to some 'falling through the crack' where persons of concern are not included in data collection and the distribution of assistance (Baal & Ronkainen 2017). This has necessitated the sustained clamoring for continuous updates of data on camps, not just at the point of entry but throughout the IDPs' existential value chain in displacement. This will reveal the current numbers of IDPs in camp at each particular time, their vulnerability thresholds, existential needs, and displacement outlooks. Proper recording of births and deaths, for instance, as they occur in the IDP camps can help in this regard (Baal & Ronkainen 2017). The faint lines during data collection, either for profiling or needs assessment, impact the accuracy of data (Internal Displacement Monitoring Center Provisional release 2007). There is the possibility of underreporting or overreporting when IDPs are asked to self-identify, especially when data collection is perceived for needs assessment purposes.

There is an issue with data storage and processing. The handbook on data protection recommended that databases should be created and well managed (Kuner and Marelli 2020). This is against the current realities in the IDP camps, where databases are poorly coordinated and managed. Effective and efficient data management in displacement includes the different reliable and valid forms and formats in which data can be stored, transferred, and shared. The General Data Protection Regulation provides data sharing with data subjects, especially personal data, unlike the found situation where participants lack inclusive access to data gathered from/on them. Research participants hardly receive feedback in violation of best practices in data ethics; a situation that could threaten the reputation of actors and put IDPs and stakeholders at risk (Gazi 2020).

Trust and mistrust in data handling are huge in the IDP camps. There are cases of over and under-reporting to take advantage of the humanitarian process. Participation in data collection and processes is often for monetary gains, with research fatigue in many instances. Yet, there must be trust and freshness in the data ecosystem to guarantee ethics. Research participants should not be unduly induced and coerced to be part of research and data; higher authorities sometimes approved the study and mandated IDPs to participate. As found during fieldwork, data collected without informed consent or questions before informed consent is unethical and violates best practices.

Data sharing raises the issue of trust, involvement/inclusion, strategic partnerships, and transparency among various humanitarian agencies and stakeholders. Telford (2020) recommends a more secure technique developed to aid data sharing while also controlling the process and reducing risk to persons of concern. The UNHCR data protection policy also supports data sharing. However, data sharing from an organization with third parties would first have to be subjected to an impact assessment, especially when it would become structural or repeated (UNHCR 2015). Furthermore, data sharing has implications for the legal basis of consent during data collection (InterAction, n.d.). In some cases, IDPs do not voluntarily consent to data collection, and in cases where they do, the awareness of IDPs on data processing as regards information and use remains questionable (Kuner & Marelli 2020). Behnam and Crabtree (2019) also report erosion of confidentiality when organizations extended consent to third parties even when such information was not included in the permission given (Coul-drey & Peebles 2019).

There is a language barrier in the data ecosystem among the IDPs interviewed. Efforts and processes must recognize language multiplicity when working on and with data in contexts of northeast Nigeria. The exclusion will not only be IDPs from the data gathering, sharing, and utilization processes but also strategic stakeholders. Many unethical practices in the data ecosystem are often traceable and linkable to the issue of language diversity as actors usually need to translate information for approval to the IDPs' and stakeholders' local languages (Kuner & Marelli 2020). This has negative consequences, particularly relative to exclusion and data ethics. For instance, while English, Hausa, and Kanuri are usually recognized as the most commonly used in data collection on camps, other minority groups who do not understand these languages are left out, creating a gap. Organizations use translators/interpreters to aid data collection to fill this language gap. However, translators sometimes differ from the data collectors and do not always get training on data collection. By this, meanings and objective intentions are easily lost as concepts are altered during translations (IDMC 2018), with ethical consequences.

Conclusion

This study's findings show that there are fundamental ethical challenges and gaps in data and humanitarian targeting domains among the IDPs in the formal camp in northeastern Nigeria. More inclusive frameworks are urgently needed to objectively capture all alienated yet significant clusters of affected people, not only the stakeholders but also the IDPs. They are usually excluded and only commonly treated as mere data sources and

instruments, and more commitments and resources are needed in conflict and humanitarian settings to achieve ethical processes in the data ecosystem. Issues identified in this study can guide humanitarian sector actors and organizations in becoming better conscious and prepared as they get involved in interventions in humanitarian crises and working with data in sub-Saharan African countries. This article contributes significantly to knowledge and lays the foundations for current and future ethical and humanitarian practices and efforts in insecurity and conflict scenarios. Emphasis should, therefore, also be on improved digital equipment and technical infrastructure and capacities for good data gathering, storage and dissemination, and training of stakeholders in data management and ethics. In addition, there should be multi-stakeholder complementary and joint efforts in data gathering and utilization that can enhance the formulation of appropriate policies and improve the lives of internally displaced people in context and in/security.

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Authors' contributions

The author(s) read and approved the final manuscript.

Declarations

Competing interests

The authors declare that they have no competing interests.

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