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Original Research

Building Capacity for Research Ethics: Policy Insights For Nepal

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Abstract

Knowledge and skills in research ethics are essential for conducting ethically responsible research. Despite some local policies, strategic guidelines, and manuals on the antithesis of research misconduct, researchers' adherence to research ethics, especially ethically responsible conduct of research, is still critical in developing countries like Nepal. This study explores the policy provisions to develop researchers' capacity on research ethics in Nepal. With the aim, we identified ten key documents related to research ethics from the University Grants Commission (UGC), Nepal Health Research Council (NHRC), and Ministry of Education, Science and Technology (MoEST). We analysed the provisions using the adapted version of Cooke's framework for research capacity development. The result shows that although there are provisions for capacity development for scientific research, none provisioned that the higher education research institutions need to take action for developing early career researchers' capacity on research ethics. Further, this review depicts several structural, institutional, and procedural limitations that make the condition difficult to adopt and implement those policies, strategic guidelines, and manuals.

Keywords: *Responsible research, Ethics in practice, Research integrity*

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Introduction

Each research has its ethical consequences, and it depends upon the interrelation between process, human agency, and the context of research. By 'research ethics' in this policy review, we mean all kinds of (un)ethical practices and procedures that significantly differ on the research process and findings. Research ethics is an applied form of moral obligations, integrity and social responsibilities governed by standard conduct or action in all stages of responsible research (Dahal & Rijal, 2022; Dhakal, 2016). It comprises of the two-dimensional process: "procedural ethics" and "ethics in practice" (Carter et al., 2017; Guillemin & Gillam, 2004). Procedural ethics encompasses the standard procedures to plan and implement responsible research, while ethics in practice are the ethical dimensions that come in each small moment of everyday life or action of the researchers (Carter et al., 2017; Resnik & Stewart, 2012). Ethical standards and moral values of the researchers will eventually result in trustworthy research, whilst the deterioration in any one of these aspects results in research misconduct. Misconduct in research can ultimately undermine the essence of knowledge, resulting in hazardous decisions and actions that can harm society and the environment, and also risk research participants (Resnik & Stewart, 2012).

In Nepal, the execution of biological and social research is gradually increasing (Sharma et al., 2016). In this regard, the concept of research ethics is also progressively evolving in the country. Notably, Nepal Health Research Council (NHRC) was established in 1991 as a central authority that controls all the health research activities (Khanal et al., 2018). Similarly, University Grants Commission (UGC) was established in 1993 for promoting, facilitating, and supporting the quality of higher education, including research practices in Nepal. This autonomous and statuary institution started providing grants for Master's, MPhil and PhD research to motivate young researchers to conduct and publish excellent research. It also focused on research ethics and increased commitment to promoting quality research in Nepal. Policies and guidelines promulgated by these different bodies also strategise for responsible research practices. However, research ethics requires a lot of attention for building up the moral obligation, to be honest, fair and responsible toward the system of science and society.

There are no exact studies on the number of cases of academic misconduct. However, there was the news of an article in Kathmandu University journal being retracted for plagiarism and the public notices by UGC (Risal, 2015). Also, there was a report in 2013 where a team of professors in Nepal published a replica of an e-book without taking permission from the initial publisher and with no appropriate acknowledgement (Ghimire, 2021). Such cases of misconduct are widespread among all levels of students, researchers and academicians, revealing an apparent lack of research honesty as well as integrity awareness in Nepal. This suggests an urgency of capacity building on academic integrity in Nepal. While a plethora of policies, guidelines and codes are prepared, the practice of ethically responsible research by maintaining its integrity is still critical. Personal values, researcher's attitude, lack of awareness regarding research integrity, lack of trust over the declared academic achievements, and lack of effective regulatory bodies are some of the factors associated with the increased research misconduct in Nepal (Dhakal, 2016; Risal, 2015; Sharma et al., 2016). Unless a culture of research ethics and integrity among the researchers is built, the issues of research misconduct will always be in the news reports.

On the other hand, the increasing number of institutions and research applicants on regulatory bodies adds a greater burden on NHRC and UGC to manage and monitor research appropriately (Sharma et al., 2016). There are limited research ethics capacity development courses and training packages in Nepal. This is one of the factors for the misleading practices in research and then social transformation. Data shows only a few capacity development activities carried out in Nepal which is primarily focused on research ethics. For instance, NHRC has organised only two events of trainings in 20 years of its establishment (NHRC, 2020). Additionally, UGC has prepared different policies and guidelines to minimise ethically irresponsible research practices, but the proper implementation of those policies and guidelines is yet to be explored. There are 11 universities, including more than 1400 affiliated colleges and campuses, but only 52 higher education institutions have an institutional review board, while the adequate research ethics committees are negligible in Nepal (NHRC, 2021; Van Teijlingen & Simkhada, 2012). It may be a very critical concern for almost all higher education institutions.

However, to unify all the higher education institutions' deliveries and develop research-informed human resources, National Education Policy 2019 envisioned research-oriented higher education facilities for all students (MoEST, 2019). As per the vision of this policy, it is essential to focus on ethically responsible research practice, but most universities do not have appropriate guidelines to evaluate both procedural ethics and ethics in the practice of their research. Likewise, the policy focuses on research as essential consideration of all educational activities of higher education but could not incorporate the components of researchers' capacity development on research ethics.

Even though the training and capacity-strengthening package is not always a solution to ethically irresponsible practice in research, it is an essential component of comprehensive approaches for creating an environment for responsible research practices (Dahal & Rijal, 2022). It is important to train young researchers to make decisions to manage ethical issues by cultivating the practice of integrity in research (Sarauw et al., 2019). Further, building researchers' capacity on ethically responsible research practice is insightful and the foundation for procedural ethics and practice ethics.

To enhance ethically responsible research practice among researchers, it is essential to focus on capacity-building provision at a policy level. Policies related to research ethics are vital to building researchers' capacity to carry out ethically responsible research. With all these facts and consequences related to ethically responsible research practice in Nepal, this review has analysed the available documents to bring a perspective on research ethics capacity building. This review aims to build an overarching view of the current provisions regarding research ethics in Nepal. This explores the prospects and opportunities for research ethics capacity development at an individual and university to the national level. Further, it will help to determine the changes that need to be brought to develop the researchers' skills to carry out responsible research. The review will be a supportive landscape document for the policymakers and responsible stakeholders to amend the policy into a concrete plan for promoting a culture of research ethics and academic integrity among researchers.

Methods of Study

We carried out a qualitative deductive content analysis of existing policies, guidelines, literature and manuals related to research ethics and research integrity (Elo & Kyngäs, 2008). With the aim of exploring facts, knowledge, and new insights for ethically sound research practices, we reviewed national policies, guidelines, strategies, and manuals related to research ethics capacity building and ethically responsible research practices in Nepal. This involved systematic coding of the contents based on Cooke's framework of capacity building in health research (Cooke, 2005). The framework mainly aims to implement and evaluate the health-related research capacity strengthening. However, it can be reflectively applicable to assess the scope of capacity building in research ethics because the framework is based on the level of research evaluation from individual to organisational.

Five Components of Building Capacity for Research Ethics

Cooke's capacity-building framework for health research is formed by considering five different aspects such as i) skills and training, ii) linkages and collaborations, iii) infrastructure, iv) continuity and sustainability, and v) appropriate dissemination. Similarly, organisational structure is also a vital element in endorsing responsible research practices. Thus, we considered it as a sub-section of infrastructure. The adopted five components have covered all aspects of developing capacity for research ethics, which is applicable to individuals at the higher education institution level.

We have incorporated indicators such as training needs assessments, training funds, provisions of skill-oriented programmes, curriculum development, discussion forums, outreach work for capacity building and mechanisms to transform knowledge under the skills and training components of the framework (Cooke, 2005). The partnerships and collaborations incorporated the provisions of research alliances, inter-professional working environment, network developments, and linkages among the universities and other research institutions. Further, we also scrutinised the provisions of international linkages for capacity development in the policy (Cooke, 2005; Griffiths et al., 2000). Similarly, indicators of continued collaboration and support for career pathways and fellowships are included in the dimension.

The stipulations of organisational structures for mentorship as well as supervision, human resources, organisational frameworks, and responsibilities related to research

ethics and systems were the major indicators under the infrastructure and organisation structures dimension (Cooke, 2005; Hyder et al., 2013). Appropriate dissemination includes the provisions of conference presentations at practice, applied dissemination, funding to support practitioners and teams to disseminate findings, and seminar programmes (Cooke, 2005).

Different components of the framework were used to extract and analyse the relevant contents from the selected documents. The contents were extracted based on five major components of capacity development such as skills and training; developing linkages and partnerships; organisational structure; infrastructure; continuity and sustainability. With the specific purpose of exploring policy provision in research ethics capacity development, qualitative content analysis was deployed in this study (Elo & Kyngäs, 2008). Qualitative content analysis is taken in this study as a systematic research method to explore the contents that describe the capacity of a researcher to conduct ethically responsible research. Further, analysing the contents extracted from the selected documents, it provides meaning and implication of the insightful contents by categorising the essence of words and sentences (Cavanagh, 1997; Downe-Wamboldt, 1992).

Selection of Review Materials

The review materials refer to different documents such as national policies, guidelines, manuals, acts and strategies, related to research ethics capacity building and ethically responsible research practices in Nepal. All materials were extracted through relevant websites such as UGC Nepal, NHRC, MoEST, and the universities of Nepal. We chose the following three organisations' documents as they are autonomously working government agencies which are responsible for ensuring ethically responsible research practices in Nepal. Based on the title and background of the publications, we decided these ten documents (Annex) are relevant as they provided information about policy provisions and the practice of research ethics in Nepal. Documents related to research ethics published by private research firms and organisations were excluded from this study.

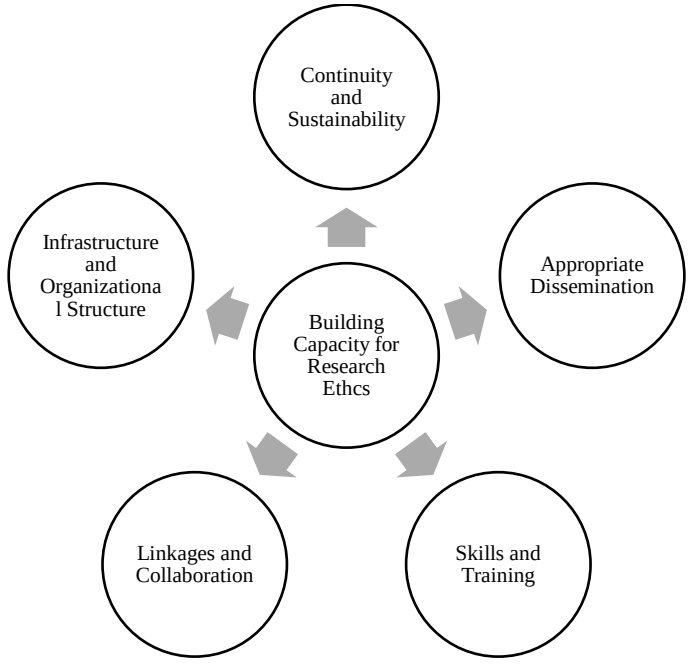
Data Extraction and Analysis Procedure

We completed the data extraction and analysis process between July and October 2020. The steps carried out in this process were: identifying and selecting a relevant documents, coding and narrative synthesis of the data that are included in the document. Back and forth communication among the authors was done to finalise the indicators of the analysis through Zoom and email communication.

Deductive analysis (see Elo & Kyngäs, 2008) was carried out based on the framework in Figure 1, which was adapted from the Cooke's Capacity Building on Health Research Framework (Cooke, 2005). In this study, the framework assists in exploring and analysing the different aspects and provisions associated with research ethics capacity development. It supports in systematic institutionalisation of research ethics in higher education. Further, its insights on structural, non-structural and sustainability aspects of capacity development may be used to ensure ethically responsible research practice.

Figure 1

Adapted Version of Cooke's Capacity Building of Health Research Framework



Findings

Research ethics capacity building has not been explicitly written in the reviewed policies and documents, but it has been depicted through the capacity strengthening in the overall research process. The findings of the policy review are presented based on the five components of capacity building adopted from Cooke's framework as below:

Skills and Training

National Health Research Policies – 2017 has mentioned the role of NHRC on research capability strengthening through training of individuals on research methods to develop a good research proposal. Nepal Health Research Strategy – 2019 aims to improve the capacity in different sectors of health research. It has included components of training on research methodology, scientific writing for young researchers and data management. However, the provision of research ethics is not clearly included in this training. *UGC Research Guidelines2019* states that the Research Integrity Committee of UGC has been delegated to implement activities and programmes to teach the responsible conduct of research, promote research ethics, prevent research misconduct, and improve the handling of allegations of research misconduct. The *UGC Research Development and Innovation Programs and Implementation Guidelines – 2019* mentions UGC's role in supporting universities in developing and improving the Responsible Research Conduct Guidelines and instruction programme. This initiation from UGC is intended to provide appropriate training and oversight to students, faculty members and research collaborators. According to the guidelines, around 180 research training events had been planned for 2019. However, less focus on training specific to ethically responsible research was showing a less priority to research ethics.

NHRC Guidelines for CME/CPD Accreditation – 2020 has a useful provision to provide credit hours for higher education professionals attending research training and participating in research-related conferences, summits, workshops, and seminars. However, it has not mentioned the credit that could be given for participating in training related to research ethics. *National Education Policy – 2019* has focused on expanding professional skill-oriented human resource development. It has encouraged the universities to organise seminars and learning-sharing activities on research and conduct higher-level studies to improve the skills of the educators. The policy focused

on the promotion of research-based higher education and innovative curriculum development. Nevertheless, the components of integrating the courses of research ethics in the university or school level curriculum are missing in the policy. Only *UGC Research Guidelines 2019* has explicitly discussed the training and skill development in the field of research ethics, while other documents have focused on the training for overall research planning and conduction.

Linkages and Collaboration

National Health Research Policies – 2017 has mentioned the promotion of national and international partnership, collaboration and networking for research. It has stated requirements for building and operationalising the network of all Institutional Review Committee (IRC)s and Ethical Review Board (ERB)s. Similarly, it has asserted the strengthening of partnerships with external development partners like the World Health Organization (WHO) and other UN agencies. Yet, it is not explicitly mentioned whether the availability of such networks is also going to work on the capacity strengthening activities related to research ethics. Likewise, the document has provisions of budget and coordination, particularly focused on research. At the same time, the scope of coordination and networking for research ethics seems to have faded in the document.

Nepal Health Research Strategy – 2019 emphasises the collaboration with universities, provincial and local governments for improving research culture as well as ethically responsible research practice mechanisms. Meanwhile, National Education Policy – 2019 states about underlining the institutions to promote international relationships and to collaborate with the international academic institutions for academic exchange. Similarly, it asserts the provision of an environment for intersectoral collaborations to increase the opportunities for research in higher education. Organising the bridging programme to create coordination between the academic and professional programmes is also a stipulation in the document. Only three documents have dealt with provisions of linkages and collaboration. However, these provisions are particularly focused on the development of research culture but not overtly focused on research ethics.

Infrastructure and Organisational Structure

National Health Research Policies – 2017 mentions promoting the Institutional Review Committees or Boards in all the appropriate research institutions. This provision helps create the structure and infrastructure for a culture of practising research ethics in higher education (Page & Nyeboer, 2017). The document also includes the provision for gradually increasing the contribution of the Government of Nepal (GoN) and External Development Partners (EDP) in the research sector. Based on the International Conference for Health Research Development, Bangkok, 10-13 October 2000, recommendation, Mexico Ministerial level summit 2004 endorsement and Bamako Mali Ministerial Summit 2008 commitment, National Health Research Policies – 2017 includes allocation of 2% of total National Health Sector budget and 5% of all EDPs health sector budget contribution in research. It is questionable if a certain amount of the budget is also separated for building the infrastructures, which not only include the physical structures but also consider the administrative processes and institutional arrangements (Cooke, 2005) to enhance capacity building in ethically responsible research in Nepal.

The first strategy of Nepal Health Research Strategy – 2019 mentioned improving and developing the structure, human resources, infrastructure, capacity, priority, and interest areas for the research system, but not primarily on capacity building of research ethics. The *UGC Research Guidelines 2019* has authorised the Research Integrity Committee to investigate research misconduct. This could be interpreted as the availability of the organisational structure to determine and investigate the research misconduct. Also, the document mentions about the academic committee in UGC that is responsible for capacity development programmes of the researchers and academicians under Quality Improvement Programs. The *UGC Research Development and Innovation Programs and Implementation Guidelines – 2019* illustrates the establishment of the Research Division in UGC as a permanent functional entity for facilitating policy formulation and management of its research support and fellowship programmes. This structure helps higher education institutions to strengthen their research capacity by taking initiatives in supporting research management cells. The provision of structures like research ethics committees, academic committees and other institutional arrangements enables an environment for a system of research ethics. The *UGC Policy Regarding Research Misconduct – 2018*

states that higher education institutes, research organisation and UGC are responsible for quality research and its integrity. They are authorised to investigate all misconduct and to monitor the entire research project. This document has shown provision for the establishment of organisational structure under UGC and higher education institutions to create an environment for responsible research. National Education Policy – 2019 mentions promoting the research culture by motivating innovative culture and technology through the establishment of the Center of Excellence. This aims to improve the quality of human resources, infrastructure, and organisational structure in carrying out the research.

Sustainability and Continuity

First, the availability of the guidelines itself has shown the commitment of the government for continuity to work on research ethics. These guidelines are useful for self-capacity development to continue practising research ethics. UGC and NHRC has been developing an annual plan for the preparation and revision of the guidelines to continue the ethically responsible research practice. Also, the provision to establish the IRC has supported sustainability for capacity development.

Nepal Health Research Strategy – 2019 states about human resources capacity building based on the country's political situation and prioritises the number of research activities. The availability of different guidelines like the *National Ethical Guidelines for Health Research – 2019* and *Health Research Ethics Training Manual – 2015* also shows the organisation's attempts to institute procedural ethics. These documents rigorously discuss the standards and procedures while lacking the provisions that could bring research ethics into practice. However, it barely discusses taking action when the researchers face problems or ethical issues while working in the real case scenario.

The provision for structural systems in the *UGC Research Guidelines 5th ed. - 2019*, the *UGC Research Development and Innovation Programs and Implementation Guidelines – 2019* and the *UGC Procedure for Addressing the Allegations of Research Misconduct – 2019* which focus on the establishment of the structures of research ethics and research division shows the government's effort to sustain ethically responsible research practice. The indicators like career pathways,

secondment opportunities, responsive funding and fellowships in studying the research ethics are missing in the policies.

Appropriate Dissemination

National Health Research Policies – 2017 mentions forming a joint team of NHRC and the Ministry of Health and Population to promote research in policy development, priority setting and dissemination of the research findings. Provisions for the development of dissemination and advocacy units are mentioned in the document. We can find provisions to communicate the research findings through policy briefs and facilitate evidence-based policy development. It also asserts the formation of a national forum to facilitate dialogue between researchers and policy makers. *National Ethical Guidelines for Health Research – 2019* has mandated the NHRC to publish, disseminate and implement guidelines for promoting ethically sound research. Likewise, The *UGC Research Development and Innovation Programs and Implementation Guidelines – 2019* has mentioned knowledge dissemination as one of the indicators to monitor the research project. It highlights assessing the number of symposiums, seminars, conferences, and interactions with the stakeholders for knowledge sharing.

Overall, the policies have a certain level of provisions regarding the research ethics and integrity practices which are not explicitly defined in all the documents. We have mapped the policy documents in Cooke's framework as follows:

Table 2

Components of Capacity Development and Its Availability in the Reviewed Documents

Name of document	Skills & training	Linkages and collaborations	Infrastructure	Continuity & sustainability	Appropriate dissemination
National Health Research Policies – 2017	✓	✓	✓		✓
Nepal Health Research Strategy – 2019	✓	✓	✓	✓	
National Ethical Guidelines for Health Research – 2019				✓	✓
NHRC Guidelines for	✓				

CME/CPD Accreditation – 2020					
Health Research Ethics Training Manual – 2015				✓	
UGC Research Guidelines 5th Edition-2019	✓		✓	✓	
The UGC Research Development and Innovation Programs and Implementation Guidelines – 2019	✓		✓	✓	✓
UGC Procedure for Addressing the Allegations of Research Misconduct – 2019				✓	
UGC Policy Regarding Research Misconduct – 2018			✓		
National Education Policy – 2019		✓	✓		

Discussion

This review identified several provisions on capacity building for research ethics. The availability of such provisions, policies, and guidelines shows the priority and awareness of creating ethically sound research (MacNeill et al., 2020). Most of the provisions in the reviewed documents are focused on research in general rather than specifically on capacity building for ethically responsible research practices. The review reveals the availability of procedural ethics, which encompasses norms, standards and procedures related to ethical planning and conduct of research (Hunt & Godard, 2013).

The researchers tend to use the research ethics guideline for carrying out research. However, they are facing problems in making decisions on ethical issues in practice. Some of the instances include the ethical disputes in lack of awareness about plagiarism, its consequences, unawareness of conflict of interest, and so on (Van Teijlingen & Simkhada, 2012). The provisions of research ethics classes in higher

education would minimise cases of news regarding the accusations of research misconduct (Limbu, 2016). A study suggests that the provision of capacity-building initiatives is necessary at the universities and college level to translate and enact the notions of ethically sound research (Geller et al., 2010).

Limited studies have been carried out to teach research ethics and integrity in higher education. Also, a study recommends teaching and practising research ethics by connecting the scenarios with the day-to-day life which are familiar to the students (Dahal, 2020). This will provide perspectives to the young researchers to recognise the ethical content and transfer problem-solving strategies (Löfström, 2012; Löfström et al., 2014).

Incorporating the provisions of research literacy from the school level could also help in familiarising the early career researchers on the accepted ethically responsible research practices. The universities and higher education institutions must be able to design and implement a course related to research ethics and integrity. It will teach the students the basic research ethics concepts, help to create dialogue concerning responsible research practices and demonstrate for promoting ethical conduct of research (Nebeker & López-Arenas, 2016). It is necessary to enforce such literacy programmes with student-centred curriculum development. Unless researchers are not allowed for a plurality of opinions and for nuances, the practice of ethically responsible research is not possible (Elit et al., 2011). In Nepal, research misconduct occurs due to the failure to sanction or punish misconduct, tolerance of the young researchers, and delays in taking action. These problems could be addressed by including policy provisions for teaching early career researchers research ethics through problem-based learning. This is found to help young researchers to internalise the sensitivity of the issue and help in reducing research misconduct.

The teaching strategies with the dialogical approach can actively engage the learner using problem-based learning and the use of cases (Knowles, 1984; Nebeker & López-Arenas, 2016). Following the provisions of curriculum development, provisions of training programmes for educators are essential. These programmes enable educators to determine innovative teaching techniques for dealing with ethically challenging experiences and uncertainties. The guidelines and strategies focusing on engaging the students to identify and navigate the ethical dimensions in their research career are

more effective in educating them about research ethics and integrity practice (Nebeker, 2014). Significant efforts have been seen in building the capacity for human subject projection through the establishment of the Institutional Review Boards and Committees in the LMICs. But the evidence focusing on ensuring the research ethics is minimal (Ana et al., 2013; Laar et al., 2020). Policy provision of a mandatory research ethics committee for academic institutions plays a vital role in the capacity building for ethically responsible research. The Ethical Review Board Guideline published by NHRC mentioned the establishment of IRC in every academic institution creating a structure for ensuring research ethics at the academic level. The World Health Organization has also stated that the states should promote the establishment and promotion of the ethical committee at the local, national, and institutional levels to improve the highest attainable quality in research (WHO, 2000). The promotion of the committees is attainable with the appropriate assessment of the training required for the council members. This would provide clarity in planning the strategies for carrying out the training for the committee members (Nyika et al., 2009).

In 2018, Delft University of Technology, Netherlands, began building a community of data champions across diverse faculties (Mejlgaard et al., 2020). The campaigns help develop and foster role models for secondary school students, undergraduates, graduates and early career researchers for research ethics and integrity (Prieß-Buchheit et al., 2020). Additionally, it is important to prioritise formative and action research to determine the best strategies for determining the culturally tailored and context-relevant ways to integrate research ethics into the courses. The provision for assessing multi-media and multi-platform campaigns with the aim of advancing research ethics culture and responsible research is essential to integrate into the policies (Prieß-Buchheit et al., 2020). Similarly, Path2Integrity, a project funded by the European commission, has been making various posters, booklets and videos focusing on secondary school and university students (Prieß-Buchheit & Häberlein, 2021). They have established the learning units that mainly focus on teaching the students about research ethics and integrity through the role model approach and rotatory role-playing approach. Also, the project has been establishing international collaborations to achieve the implementation of education practices. With this aim, Path2Integrity Community Nepal (-led by the authors) also has been carrying out webinars and teaching activities among young researchers, which were found to be effective ways to

spread knowledge and practice about research ethics and integrity (Dahal & Rijal, 2022). So, such interventions could be adopted by contextualising their essence and scaled up by the support of the government to foster the capacity of the entire academicians and researchers in research ethics.

There is a need for long-term plans to establish a national organisation structure to establish a standard to promote a responsible research practice in both health and social sciences. This will help to bring consensus among the relevant stakeholders on research ethics and integrity. They will also be supportive of developing platforms for transferring the knowledge to safeguard research ethics. Apart from this, it is important to prioritise studies on research ethics to make essential recommendations. Handfuls of such evidence will be supported in policy reforms for the researchers and all the stakeholders in research ethics capacity building.

Conclusion

This policy review insight varied provisions regarding research ethics in Nepal not only focused on reviewers but also on researchers. Procedural ethics or administrative process of research ethics approval has been explicitly provisioned rather than 'ethics in practice' in the reviewed policies documents. Building research ethics capacity is possible when the researchers or academicians get varied opportunities to get acquainted with the contemporary or emerging ethical issues of research in practice. It is equally important to design, develop and endorse curriculum of research ethics and integrity at all levels of our education system. Training for all educators to facilitate the level-wise course could add an asset in the policies for fostering research ethics in Nepal. By focusing on teaching honesty for responsible research, it is essential to consider the five components of capacity building on research ethics. Empowering the structure and intersectoral collaborations can help in promoting research ethics and integrity in Nepal. Provisions of formative research on teaching research ethics in higher education also seem important in the country for developing ideas to teach research ethics in Nepal.

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