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Occupational Health in Higher Education Institutions (HEIs) in Nepal: A Review of Policies, Practices, and Challenges

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| Article Info. | Abstract |
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| <p>Responding Author Tara Prasad Gautam</p> <p>Email tara2jun@gmail.com</p> <p>Article History Received: 10 January, 2025 Accepted : 12 May, 2025</p> <p>Cite Gautam T. P., Mishra, A. K., &Shailashri, V. T. (2025). Occupational health in higher education institutions (HEIs) in Nepal: A review of policies, practices, and challenges. <i>Insight Journal of National Open College</i>, 2(1), 61–80. https://doi.org/10.5281/zenodo.15365904</p> | <p>Ensuring the physical, emotional, and social well-being of teachers, staff, and students inside higher education institutions depends on occupational health. But in Nepal, occupational health is still a neglected policy field with little institutional focus and uneven application. This review intends to evaluate the present state of occupational health in Nepalese HEIs by means of an analysis of pertinent policies, institutional practices, and international benchmarks and to recommend evidence-based changes. Examining peer-reviewed academic papers, government documents, program frameworks and international occupational health guidelines this study applies a systematic literature review approach. Thematic content analysis was used to aggregate ideas across five main areas: policy frameworks, institutional practices, global models, implementation gaps, and reform initiatives. Although worldwide models offer strong and transferable techniques, Nepali HEIs still struggle with low institutional priority, poor inter-ministerial cooperation, and insufficient finance. The study underscores the need to integrate occupational health into quality assurance systems, institutional governance, and national education reform agendas. Focusing particularly on occupational health in the framework of Nepal's higher education system, this is the first thorough scholarly review. It closes a vital information gap and offers a policy-relevant road map for institutional reform, therefore matching occupational well-being with national development objectives and the "Prosperous Nepal, Happy Nepali" vision. Among its practical suggestions for HEIs and legislators are creating Occupational Health Units, including mental health services, implementing lab safety rules, encouraging ergonomic digital learning environments, and including occupational health into the QAA process. These actions can improve student well-being, staff effectiveness, and institutional resilience.</p> <p>Keywords: occupational health, higher education institutions, workplace safety, mental health, quality assurance</p> |

Introduction

A comprehensive approach called occupational health seeks to promote and preserve the highest achievable levels of physical, mental, and social well-being for workers in all professions and environments (WHO, 2020; Rantanen&Fedotov, 2005). Higher education institutions (HEIs) expand the definition of occupational health beyond teaching and administrative personnel to include researchers,



laboratory workers, and students involved in academic, practical, and field-based activities. The academic environment is a complicated interaction of physical workplaces, mental load, psychosocial factors, institutional culture, and organizational policies—each of which greatly affects professional well-being and performance.

Globally, occupational health is recognized as a fundamental determinant of institutional productivity, safety, and sustainability. Countries with robust educational systems—such as the United Kingdom, Australia, and Canada—have integrated occupational health into their governance models by enforcing regulatory compliance, fostering mental health awareness, and embedding ergonomic and preventive health systems within their institutions (Hughes & Ferrett, 2016; CCOHS, 2021). However, in Nepal, the implementation of occupational health frameworks in HEIs remains at a nascent and fragmented stage though QAA force to improve

Around the world, occupational health is acknowledged as a basic driver of institutional sustainability, safety, and efficiency. Countries with strong educational systems—like the United Kingdom, Australia, and Canada—have included occupational health into their governance structures by means of regulatory compliance, promotion of mental health awareness, and embedding of ergonomic and preventive health systems inside their institutions (Hughes & Ferrett, 2016; CCOHS, 2021). at Nepal, nevertheless, the application of occupational health systems at HEIs is still in its early, fragmented phase.

Routine exposure to occupational hazards including exposure to toxic chemicals, biological risks, ergonomic strain, psychological pressures, poor sanitation, and limited access to healthcare services characterizes Nepalese workers—including those in health, construction, agriculture, and education (Prajapati et al., 2023). In HEIs, these risks take many different shapes: dangerous laboratory conditions lacking personal protective equipment (PPE), poorly ventilated classrooms, digital fatigue from extended screen exposure, and unaddressed mental health issues like stress, burnout, and workplace harassment. These difficulties are also aggravated by the absence of institutional health policies, inadequate safety infrastructure, and untrained staff members to handle health hazards.

Though national legislative tools like the Labour Act 2017 and the Occupational Safety and Health (OHS) Policy 2019 have been published, their implementation in the education sector has been negligible. Though thorough in purpose, these policies lack sector-specific operating guidance for universities. Moreover lacking or poor are regulatory systems guaranteeing university conformity, which creates a major policy-practice gap.

Emphasizing governance reform, quality improvement, and digital transformation in HEIs, the continuing Nurturing Excellence in Higher Education Program (NEHEP), a flagship reform project of the University Grants Commission (UGC) financed by the World Bank, stresses On the other hand, occupational health is not specifically acknowledged as a fundamental measure of institutional quality or performance. Though NEHEP encourages social protections and ongoing professional development (CPD), it does not require the creation of occupational health units, regular health monitoring, or mental health interventions inside award recipient organizations.

Occupational health problems have been exacerbated even more by the COVID-19 epidemic and the resulting move to digital and blended learning. Poorly constructed workstations and insufficient ergonomic awareness cause faculty and students more digital load, extended screen exposure, musculoskeletal pain, and digital tiredness. Institutions have also battled, meantime, to offer emotional support, change infrastructure, or adjust their health policies to meet the needs of remote and hybrid academic operations.

Moreover common at HEIs are gender-related occupational health hazards—including sexual harassment, gender-based discrimination, and lack of secure reporting channels—yet they go underreported and are poorly handled. Though its application at the institutional level has been uneven, the NEHEP social safeguards framework sees Sexual Exploitation, Abuse, and Harassment (SEA/SH) prevention as a cross-cutting concern.

Given this background, it is urgently necessary to acknowledge occupational health as a fundamental element of institutional governance, staff wellbeing, academic performance, and student achievement. In the intricate web of Nepal's educational system, the relationship between students and administrators is a crucial thread that significantly impacts learning outcomes and student perceptions of their environment. This relationship is influenced by a complex network of factors, including effective communication among staff, robust human resource management, and adequate infrastructure support, all of which are essential for fostering a conducive learning environment (Gautam, Adhikari, & Lingden, 2024). Comprehensive occupational health plans in HEIs have to include not only physical safety and infrastructure but also mental health support systems, ergonomic design, hazard assessment procedures, policy integration, inter-sectoral cooperation, and inclusive grievance redressal systems.

Thus, the main goal of this study is to methodically investigate the present state of occupational health in Nepalese HEIs by means of an analysis of:

- National legislative and policy framework
- Institutional processes and preparation,
- Transferable practices and global benchmarks,
- Difficulties in applying, and
- Reform suggestions based on research.

The main goal of this paper is to critically evaluate the present state, institutional gaps, and developing demands of occupational health inside Nepalese Higher Education Institutions (HEIs). Particularly in the higher education sector, the evaluation intends to evaluate the relevance and application of national policies and regulatory frameworks—such as the Labour Act 2017 and the Occupational Health and Safety (OHS) Policy 2019. It also assesses institutional practices on occupational health including the presence of occupational health units, mental health services, laboratory safety procedures, ergonomic infrastructure, and grievance redressal systems. This paper also looks at worldwide best practices from nations including the United Kingdom, Australia, and Canada to find strategic interventions that could fit Nepal's institutional framework. The research also points out important systematic issues such poor institutional governance, insufficient financial investment, cultural

stigma around mental health, and lack of empirical data, all of which impede the efficient application of occupational health policies in HEIs. Particularly under the Nurturing Excellence in Higher Education Program (NEHEP), it finally offers evidence-based recommendations for including occupational health into performance-based funding mechanisms, institutional strategic plans, and internal quality assurance systems (IQAS). By means of these goals, the study aims to place occupational health as a vital foundation of academic excellence, institutional resilience, and human resource well-being in Nepal's higher education system. It also aims to suggest strategic interventions to promote a culture of occupational health and well-being in Nepal's higher education system—vital to reaching the more general objectives of academic excellence, labor-market readiness, and inclusive development as envisioned by the Prosperous Nepal, Happy Nepali agenda.

Methodology

Critically assessing the situation of occupational health in higher education institutions (HEIs) in Nepal, this paper uses a systematic literature review (SLR) approach. The approach was meant to guarantee a thorough knowledge of the policy environment, institutional practices, and sectoral issues connected to occupational health and safety (OHS) in the academic field.

Data Sources and Search Strategy

- Using academic databases including:
- NepJOL (Nepal Journals on the Internet)
- Scholar from Google
- • Medline
- • Science Direct.
- • Springer Link

Government and institutional repositories (e.g., Ministry of Education, University Grants Commission Nepal)

Key search terms included

"occupational health", "higher education", "HEIs in Nepal", "university staff health", "academic workplace safety", "mental health in education", and "occupational safety and well-being".

The search was restricted to papers published between 2010 and 2024, with preference given to

- Peer-reviewed journal publications
- Government policy papers (e.g., Labour Act 2017, OHS Policy 2019)
- Manuals of strategic programs—e.g., NEHEP Operations Manual, 2022)
- International organization reports—e.g., ILO, WHO, NIOSH

Inclusion and Exclusion Criteria

- Documents were included should they
- Emphasized specifically on occupational health and/or safety in the education sector
- Offered policy-based or empirical proof of HEI working conditions
- Were written in either English or Nepali

- Related to Nepal's socio-economic and educational background
- Materials left out included:
- Media pieces, non-academic blogs, or editorials
- Papers not connected to education or occupational health

Data Extraction and Synthesis

Relevant data was gathered from the chosen papers and arranged into subject categories:

- Policy frameworks—for example, Labour Act, OHS Policy
- Institutional policies (e.g., ergonomics, lab safety, health services)
- Global models—e.g., Canada, Australia, UK

Challenges and Implementation Gaps

Thematic content analysis was used to examine the data and find repeating patterns, policy enforcement gaps, stakeholder duties, and institutional readiness. Ensuring the integration of both occupational safety and more general health promotion components, each theme was then read in connection to the Total Worker Health® Framework (NIOSH, 2015).

Triangulation and Validation

To guarantee consistency and policy relevance, government policy papers (e.g., NEHEP Manual, 2022; UGC QAA guidelines) were triangulated with academic literature. Insights from Prajapati et al. (2023) Status of Occupational Health and Safety in Nepal also helped to frame more general national trends and concerns.

Conceptual Framework

Definition and Scope

A interdisciplinary field inside public health, occupational health aims to guarantee and improve the physical, mental, and social well-being of people in all kinds of work contexts (Rantanen&Fedotov, 2005). The International Labour Organization (ILO) defines occupational health as not only the absence of disease or infirmity but rather as encompassing all physical and mental components that affect worker health including environmental, ergonomic, and psychosocial aspects directly related to workplace activities (ILO, 2019).

In the framework of Higher Education Institutions (HEIs), occupational health encompasses a wider range of duties and hazards outside conventional industrial environments. These consist of:

Academic pressures and burdens from administrative duties, research, grading, and teaching.

Mental health services to control burnout, depression, anxiety, and psychosocial pressures among academic members as well as students.

- Especially for personnel working under limited conditions or extended screen time, ergonomic workspace design and indoor air quality management are important.
- Exposure to hazardous materials in laboratories and research facilities, including biological, chemical, and radioactive agents.

- Preventive care and health coverage, including institutional first-aid systems, Immunizations, and routine medical examinations.

These elements highlight the importance of seeing HEIs as complicated occupational systems where occupational health has to be ingrained not only in infrastructure but also in policy, training, and institutional culture (Prajapati et al., 2023).

Theoretical Framework: Total Worker Health® (NIOSH)

Rooted on the Total Worker Health® (TWH) framework created by the National Institute for Occupational Safety and Health (NIOSH, 2015), this review The TWH approach emphasizes the integration of workplace safety with more general public health promotion initiatives, therefore acknowledging the relationship between work-related hazards and non-occupational health determinants.

Among the main elements of the Total Worker Health® paradigm are:

- Integrated interventions that tackle both occupational hazards (e.g., lab safety) and health promotion (e.g., fitness, nutrition).
- Organizational leaders dedicated to building a culture of health and safety.
- Participation in wellness programs and safety planning by workers involved and engaged.
- Data-driven review, monitoring, and adaptation provide ongoing development.

Using this approach to HEIs in Nepal would help to methodically solve fragmented health and safety policies by matching institutional planning with a whole well-being agenda. It promotes not just adherence to safety rules but also the development of sustainable, healthy academic settings supporting great creativity and output.

The Review of Literature

Policy Review

A small but changing collection of national laws, regulations, and sectoral projects aiming to guarantee workplace safety, health fairness, and institutional responsibility controls occupational health in Nepal. The implementation of these regulations to the higher education sector—especially in universities, component campuses, and linked institutions—remains inconsistent and mostly ignored, though. This part provides a summary of the main policies pertaining to occupational health and safety (OHS) in Nepal, then discusses their applicability—or lack thereof—within higher education institutions (HEIs).

National Legislative Frameworks

Labour Act 2017 (2074 B.S.)

The Labour Act specifies basic rights connected to health and safety at the workplace. Chapter 9 of the Act specifies that companies have to make sure

- Safe working conditions
- Well-ventilated and sanitary work areas
- Providing personal protection equipment (PPE)
- Restrooms, clean drinking water, and first aid access.
- Employees exposed to health concerns should get regular health exams

Though the law mostly affects industrial and formal employment sectors, it applies equally to all registered institutions, including universities. Implementation in HEIs is mostly lacking, nonetheless, because of legal loopholes and insufficient enforcement tools.

Occupational Safety and Health (OSH) Policy, 2019

This policy is Nepal's official guide to guaranteeing occupational safety in all fields. It supports:

- Risk management institutional systems
- OHS awareness training courses
- Hazard assessment and health surveillance
- OHS information system development

Though it has a whole vision, the policy does not specifically mention the education sector or set criteria for student workplaces at HEIs, research labs, or instructional contexts. Its implementation in universities is still unclear.

Environment and Social Management System (ESMS) – UGC (2022)

The University Grants Commission (UGC) developed an ESMS framework consistent with World Bank safeguards under the Nurturing Excellence in Higher Education Program (NEHEP). The NEHEP Operations Manual notes:

- Under institutional governance, occupational health and safety is acknowledged as a cross-cutting problem.
- The need of social safety on campuses supported by grants
- Upgrades to infrastructure and laboratories including OHS risk evaluations
- The execution is limited to certain universities under NEHEP sponsorship; there is no consistent national mandate for all HEIs.

Institutional Guidelines and Implementation Gaps in HEIs

Though several Nepalese institutions have created separate policies on laboratory safety, chemical handling, and natural disaster preparedness, these initiatives are inconsistent and lack institutional consistency. Most higher education institutions (HEIs), especially public and community campuses, lack thorough or uniform occupational health and safety (OHS) policies. Lack of organized policy tools and poor administrative practices has led to uneven execution, hence creating notable institutional readiness and compliance gaps.

Important institutional shortcomings are the lack of appointed OHS officers, who would normally be in charge of coordinating risk assessments, carrying out safety drills, and overseeing workplace health interventions. Moreover, only a small number of HEIs have set up institutional OHS committees, which are vital for tracking safety compliance, examining workplace events, and guiding leaders on preventive actions. Especially for individuals exposed to occupational risks in laboratories and engineering workshops, there is also a general absence of health surveillance mechanisms to track faculty and staff well-being. Though rising psychosocial concerns among professors and students—such as academic stress, burnout, and workplace harassment—mental health services are either completely lacking or poorly structured (Shrestha&Karki, 2022).

These institutional deficiencies reflect the more general national picture described by Prajapati et al. (2023), who underline that inadequate enforcement, limited training, and lack of inter-agency collaboration hinder occupational health in Nepal. Likewise, Gautam and Adhikari (2023) contend that although Nepal has adopted basic laws like the Labour Act (2017) and OSH Policy (2019), organized implementation attempts mostly leave out higher education. Their research shows that many Nepalese HEIs run without fundamental health and safety policies and that faculty and staff members are ignorant of their rights and obligations regarding occupational safety.

Policy execution is hampered even more by infrastructure constraints including antiquated buildings, packed classrooms, and hazardous laboratory conditions. Furthermore, the low administrative ability of HEIs—resulting from bureaucracy, underfunding, and insufficient professional development—exacerbates a reactive rather than preventive attitude toward occupational health. Particularly in rural and resource-limited campuses, these structural obstacles not only undermine institutional safety and well-being but also influence academic output and staff retention.

Mainstreaming occupational health in institutional governance systems, connecting it to accreditation and funding systems, and improving HEI operational capability by means of policy alignment, staff training, and infrastructure investment would help to solve these challenges.

International Policy Benchmarks for Academic Institutions

Around the world, strong legal systems, institutional responsibility, and internationally accepted criteria direct higher education's occupational health and safety (OHS). Long ago, countries like the United Kingdom, Australia, Canada, and the United States acknowledged educational institutions as official workplaces and hence required thorough occupational health policies for academics, administrative staff members, and students.

Occupational health policy in the United Kingdom is based on the Health and Safety at Work Act 1974, which mandates employers—including universities—to guarantee, as far as reasonably feasible, the health, safety, and welfare of all staff members and students. This covers responsibilities for workplace design, mental health support, personal protective equipment (PPE), and risk assessments (Health and Safety Executive [HSE], 2021). UK universities usually carry out these policies via university-wide audits, staff training initiatives, and institutional health and safety committees.

The Model Work Health and Safety Act 2011 in Australia mandates educational institutions to carry out continuous workplace assessments, avoid exposure to psychosocial and physical hazards, and integrate safety policies into organizational governance. Universities such as the University of Sydney and the University of Melbourne keep integrated OHS departments and release yearly safety performance reports (Safe Work Australia, 2022). These universities also follow ISO 45001, the worldwide standard for Occupational Health and Safety Management Systems, which offers a framework for spotting dangers, lowering risks, and assuring legal compliance.

Likewise, in Canada, post-secondary schools are governed by provincial Occupational Health and Safety Acts, which legally require universities to create safety policies, training, emergency planning, and reporting systems. Universities like McGill University and the University of British Columbia keep

thorough occupational health portals and hazard reporting dashboards available to staff and students (Canadian Centre for Occupational Health and Safety [CCOHS], 2021).

Though OSHA (Occupational Safety and Health Administration) rules apply generally to businesses, many institutions voluntarily follow OSHA guidelines and internal procedures to protect the welfare of their community. This covers required reporting of workplace injuries, lab safety certification, mental health services, and ergonomic assessments.

These all have several fundamental ideas in common:

- Compulsory and regular risk evaluations;
- Emphasis on both physical and psychological safety.
- Incident reporting protocols and obvious grievance redressal systems;
- Cross-functional institutional safety committees and committed OHS staff.

In contrast, Nepali HEIs have neither quality assurance systems or enforceable occupational health policies acknowledging OHS as a basic component of institutional excellence. Though the University Grants Commission (UGC) encourages institutional governance and physical infrastructure standards under its Quality Assurance and Accreditation (QAA) framework, it does not require the inclusion of occupational health systems, mental health services, or safety audits as part of its evaluation criteria (UGC, 2022). As a result, there are no organized OHS strategies for Nepalese colleges and no legal consequences or financial disincentives for noncompliance.

Including international benchmarks—especially ISO 45001, grievance redressal norms, and mental health requirements—into Nepal's higher education policy frameworks will greatly enhance institutional accountability, personnel safety, and academic achievement.

A comprehensive policy and governance change is absolutely needed to align Nepalese higher education institutions (HEIs) with international policy standards on occupational health and safety (OHS). Among the top suggestions is to institutionalize occupational health frameworks across all HEIs, requiring the creation and execution of campus-level occupational health plans in line with Nepal's Occupational Safety and Health (OSH) Policy of 2019 (MoLESS, 2019). Unlike nations like the United Kingdom, Australia, and Canada—where legal tools like the Health and Safety at Work Act (1974), ISO 45001, and Model WHS Act enforce university-wide OHS systems—Nepal now lacks regulatory requirements particular to higher education (HSE, 2021; Safe Work Australia, 2022; ISO, 2018). Especially under Nepal's continuing Nurturing Excellence in Higher Education Program (NEHEP), it is essential to connect OHS implementation to institutional quality assurance systems and performance-based funding. Ensuring that institutions are evaluated not just for infrastructure and governance but also for health and safety preparation, the University Grants Commission (UGC) should integrate occupational health indicators in its Quality Assurance and Accreditation (QAA) framework (UGC, 2022). Recognizing the particular risks related to laboratories, digital learning, and psychosocial hazards in educational environments, the Ministry of Education, Science and Technology (MoEST) working with UGC should also create sector-specific OHS guidelines suited to the academic sector. Ultimately, efficient OHS execution will depend on MoEST, the Ministry of Health and Population (MoHP), and the

Ministry of Labour, Employment and Social Security (MoLESS) working closely together to coordinate inter-ministerial activities, so fostering integrated enforcement, shared resources, and aligned responsibility across sectors. Lacking this unified policy framework, Nepalese HEIs will keep missing worldwide standards and neglect the health and well-being of their academic communities.

Institutional Practices in HEIs

Most higher education institutions (HEIs) in Nepal lack organized policies, functional systems, and sufficient infrastructure to protect the physical, mental, and psychosocial well-being of their staff members and students in spite of the growing knowledge of occupational health and safety (OHS) in the workplace. In this area, institutional initiatives are still mostly reactive and scattered rather than integrated into strategic governance or academic frameworks.

Institutional Health Units or Officers

Few, if any, HEIs in Nepal run specific occupational health units or have health & safety officials. Though big public colleges like Tribhuvan University have not yet formalized official departments in charge of occupational health monitoring, emergency response, or risk management. Though it falls short of requiring campus-level health units or institutionalizing occupational health responsibilities, the NEHEP Operations Manual (UGC, 2022) highlights health and safety issues under its environmental and social safeguard policies.

Poor Mental Health and Psychosocial Support

Particularly in the wake of the COVID-19 epidemic, both students and academic staff members express widespread burnout, anxiety, stress, and despair. Shrestha and Karki (2022) underline that the lack of on-campus counseling services or mental health policy has aggravated psychological suffering among academic members, who usually balance high workloads with no administrative or emotional support. Students also experience academic pressure, bullying, and a lack of support structures, all of which seriously endanger their mental well-being.

Though NEHEP gives underprivileged groups' inclusion and support top priority, its execution lacks particular provisions for mental health capacity building inside HEIs or psychosocial safety.

Poor Physical Infrastructure and Unsafe Workspaces

Many HEIs' science and engineering departments run without following laboratory safety guidelines. Common problems include the following:

- Insufficient ventilation in classrooms and laboratories
- No personal protection equipment (PPE)
- Insufficient mechanisms for chemical disposal and storage.
- Old structures with outdated or damaged electrical wiring

Prajapati et al. (2023)'s Review Article highlights comparable issues across Nepal's industrial sectors including exposure to harmful chemicals, respiratory risks, and unsafe physical surroundings. Academic environments, particularly in departments with lab-based instruction and technical knowledge, reflect these concerns.

Ergonomic Risks and Digital Overexposure

Especially among professors, the quick transition to online learning—accelerated during the pandemic—has resulted in more screen time, poor workstation design, and musculoskeletal strain. Physical pain and weariness are caused by long hours of labor, lack of ergonomic chairs and desks, and no breaks. Although NEHEP encourages digitization of higher education, it has not yet dealt with the occupational health hazards resulting from digital labor.

Gendered Risks and Harassment

Underreported and inadequately handled are workplace harassment, discrimination, and lack of safe grievance systems—especially for female professors and students. Though enforcement and campus-level implementation are lacking or non-existent, the NEHEP Operations Manual does mention SEA/SH (Sexual Exploitation and Abuse/Sexual Harassment) standards under its social safeguards.

Summary of Institutional Practice Gaps

The evaluation of occupational health practices in Nepalese higher education institutions uncovers major gaps in almost all important aspects of workplace health and safety. These discrepancies point to a systematic disregard of occupational health values and a pressing need for policy integration, capacity building, and resource allocation. The table below combines the noted shortcomings:

Table 1

Summary of Institution

| Occupational Health Aspect | Status in Nepalese HEIs |
|-----------------------------------|---|
| Health Units & OHS Officers | Absent in most campuses; no designated personnel for occupational health monitoring or emergency response. |
| Mental Health Services | Poor or non-existent; most institutions do not employ trained counselors or operate psychosocial support units. |
| Lab and Infrastructure Safety | Inadequate safety measures in laboratories, including absence of PPE, poor ventilation, and outdated equipment handling protocols. |
| Ergonomics & Digital Workspaces | No policies addressing digital fatigue, workstation ergonomics, or long screen-time impacts on faculty/students. |
| Gender Safety & Harassment | Weak or symbolic mechanisms for addressing sexual harassment; grievance redressal systems are either absent or ineffective in ensuring confidentiality and justice. |

These disparities reflect the poor prioritization of occupational health within institutional governance and regulatory control in the education sector, not only operational but also structural (Prajapati et al., 2023; UGC, 2022).

A thorough reform plan is very necessary to tackle the ongoing and systematic institutional practice gaps connected to occupational health in Nepalese higher education institutions (HEIs). These changes have to be based on the internal quality assurance systems (IQAS) of every institution and backed by

outside UGC and Ministry of Education, Science and Technology (MoEST) supervised frameworks. Institutional audits show that most HEIs run in unsafe and ill-equipped infrastructure—especially in laboratories and classrooms—lack committed health and safety units and have few mental health services. Though screen-based education and learning have grown, gender safety policies are still only symbolic and digital ergonomics is almost non-existent. All HEIs should set up required Occupational Health and Safety (OHS) Units run by qualified people in charge of risk assessments, emergency response coordination, and health authority liaison—ensuring a culture of prevention rather than reaction by doing so (UGC, 2022). Simultaneously, mental health services have to be institutionalized by employing experienced counselors, developing private and easily accessible areas for psychological support, and including mental health literacy into staff development initiatives (Shrestha&Karki, 2022). Lab safety procedures must also be standardized by means of PPE, safety audits, and thorough staff and student training, especially in departments handling chemical and biological exposure (Prajapati et al., 2023). HEIs should spend on ergonomically safe digital workstations, enforce rules on screen time, and raise digital health awareness to avoid physical strain and weariness as blended and digital learning models grow. Furthermore, gender-sensitive policies and SEA/SH (Sexual Exploitation, Abuse, and Harassment) frameworks have to be institutionalized via grievance redressal systems, required reporting procedures, and training courses in line with national law and NEHEP's social safeguard mandates (UGC, 2022). These treatments are not just corrective but also transformational, so matching occupational health with institutional performance, staff retention, and student well-being. Nepalese HEIs can change into inclusive, strong, and health-conscious learning environments that serve the national goal of "Prosperous Nepal, Happy Nepali" by incorporating these changes into strategic development plans and accreditation criteria.

Comparative Global Practices in Occupational Health in Higher Education

In many industrialized countries, where universities run under rigorous national health and safety rules and integrate thorough well-being systems inside their institutional structures, occupational health in higher education has become a strategic focus. The impact of modernisation and industrialisation has expanded beyond economic practices to affect cultural values and family responsibilities. (Gautam & Mishra, 2024) Countries like the United Kingdom, Australia, and Canada have created mature models of occupational health management in higher education institutions (HEIs), providing insightful lessons for Nepalese universities seeking to institutionalize comparable norms.

United Kingdom

The Health and Safety at Work Act 1974 governs universities in the UK, which requires employers—including universities—to guarantee, so far as practically feasible, the health, safety, and welfare of employees and students. Universities such as the University of Manchester and the University of Oxford have:

- Departments of full-time occupational health
- Lab, field, and office settings risk assessment procedures
- Campus-wide wellness efforts and mental health services
- Academic staff musculoskeletal disorder (MSD) preventive projects (Hughes & Ferrett, 2016)

Strategic HR policies include these actions; internal and external audits evaluate them to guarantee ongoing progress and compliance.

Australia

Operating under the Work Health and Safety Act 2011, Australian HEIs standardize OHS obligations across all sectors. Universities include the University of Melbourne and the University of Queensland put into practice:

- Ergonomic workplace evaluations
- Rehabilitation programs for return to work
- Faculty resilience training, student counseling, and mental health support lines
- Institutional wellness policies, such as worker fitness programs and flexible work arrangements (Safe Work Australia, 2022)

Furthermore, the Australian Human Rights Commission enforces anti-harassment policies and promotes inclusive workplace design.

Canada

Post-secondary schools in Canada fall under provincial Occupational Health and Safety Acts. Universities like McGill University and the University of British Columbia provide:

- University-wide committees on occupational safety
- Systems of reporting and OHS dashboards
- Units of health promotion addressing physical, mental, and emotional well-being
- Training courses and safety certifications for field and laboratory research conducted by the Canadian Centre for Occupational Health and Safety [CCOHS], 2021)

Deeply ingrained in participatory government, these systems involve academic bodies and student unions in policy execution.

Implications for Nepal

Including occupational health practices in Nepalese higher education institutions (HEIs) is both a critical necessity and a developing chance. Global models from the UK, Canada, and Australia provide robust institutional frameworks—defined by wellness programs, mental health services, ergonomic workplace designs, and preventive risk management—that can be adapted to Nepal's socio-institutional setting (Hughes & Ferrett, 2016). The experiences of these systems show that institutional commitment, coordinated policies, and cultural transformation rather than significant financial resources drive the promotion of occupational health.

Particularly in educational institutions, notable disparities in occupational health management remain in Nepal. Many campuses lack organized health units, qualified safety officers, and official mental health support systems (Prajapati et al., 2023). Emphasizing quality improvement, labor-market alignment, and digitization, the University Grants Commission (UGC) continuing Nurturing Excellence in Higher Education Program (NEHEP) has laid the framework for transformation. Although NEHEP

includes environmental and social protections, occupational health is not yet fully integrated into its strategic result areas or disbursement-linked metrics (UGC, 2022).

Nepalese HEIs should emphasise the following pragmatic initiatives to fit with national goals and worldwide standards:

- Develop and institutionalize campus-wide occupational health policies integrated into their strategic and operational structures.
- Create safety and wellness cells or committed Occupational Health Units (OHUs) in charge of preventive care, psychological counseling, and emergency readiness.
- Create digital reporting and private grievance redressal systems for incidences of dangerous conditions, emotional discomfort, or workplace harassment.
- Regular risk assessments concentrating on laboratory safety, ergonomic workspace design, psychological hazards, and disaster readiness should be done.

Encourage inter-ministerial cooperation especially among the Ministry of Education, Science and Technology (MOEST), the Ministry of Labour, Employment and Social Security (MoLESS), and the Ministry of Health and Population (MoHP) to guarantee cross-sectoral coherence and resource mobilization.

Implementing these policies would not only enhance the well-being and safety of academic staff and students but will also assist the more general objectives of the Government of Nepal's vision for higher education reform. In line with the national vision of "Prosperous Nepal, Happy Nepali" (UGC, 2022), the NEHEP Operations Manual confirms that higher education ought to be research-driven, inclusive, and innovation-oriented. Traditional silos are broken down in a learning company, allowing all areas to collaborate toward a common goal. Start by doing a self-audit or evaluation of your organization to determine (Gautam, 2022) Realizing this objective depends on occupational health since a healthy academic atmosphere promotes more efficient teaching and research results, less attrition, and higher production.

Furthermore, including occupational health into the Quality Assurance and Accreditation (QAA) system would motivate HEIs to address these concerns by connecting well-being to institutional performance and accreditation results.

Key Challenges in the Nepali Context

Although Nepal has implemented national policies like the Labour Act 2017 and the Occupational Safety and Health (OSH) Policy 2019, their conversion into actual occupational health practices in higher education institutions is limited. The following difficulties draw attention to the structural and institutional deficiencies preventing the efficient application of occupational health systems in HEIs all throughout the country.

Table 2*Key Challenges*

| Challenge | Description |
|-----------------------------|--|
| Weak Policy Implementation | Despite national frameworks supporting occupational health, there is a significant gap between policy and practice. Most HEIs lack functional mechanisms to implement the OSH Policy (MoLESS, 2019) and NEHEP's safeguard requirements. Institutions rarely conduct health audits, and compliance with safety standards is not monitored or enforced by regulatory bodies (UGC, 2022). |
| Budgetary Constraints | Financial limitations hinder the development of health infrastructure, particularly in community campuses and provincial institutions. NEHEP and UGC budgets prioritize academic development and digitization, while occupational health is sidelined due to the absence of earmarked allocations (UGC, 2022). The cost of establishing health units or conducting awareness training is often perceived as non-essential. |
| Cultural Stigma | Mental health issues—such as anxiety, depression, and burnout—are stigmatized within academic environments. Faculty and staff are reluctant to seek help due to fear of social judgment or professional repercussions. This stigma is reinforced by a lack of institutional mental health policies and training on psychosocial well-being (Shrestha&Karki, 2022). |
| Infrastructure Deficiencies | Many HEIs operate in deteriorating buildings with inadequate ventilation, poor lighting, and lack of ergonomic workspaces. Science and engineering faculties are particularly affected due to unsafe laboratories, absence of personal protective equipment (PPE), and no formal lab safety protocols. These deficiencies directly compromise physical well-being and increase the risk of occupational injuries (Prajapati et al., 2023). |
| Lack of Data and Research | There is a notable dearth of empirical studies and institutional reporting on occupational health indicators. Most HEIs do not maintain health records, conduct risk assessments, or publish workplace health audits. This absence of data impedes evidence-based policymaking and limits institutional learning or benchmarking with global standards (Gautam, 2023). |

Systemic Implications

These difficulties are not unique but rather connected, therefore reflecting more general problems of poor administration, underfunding of non-academic services, and a lack of emphasis on worker well-being in the higher education reform agenda. Further adding to institutional negligence, the present performance-based funding (PBF) system under NEHEP excludes occupational health as an evaluation factor.

Furthermore, a fragmented affiliation system combined with centralized decision-making causes very unequal health standards on different campuses. Particularly private and community campuses suffer great differences in occupational health care delivery because of insufficient regulatory control and national program integration.

Future Research Directions on Occupational Health in Higher Education Institutions (HEIs) in Nepal

Future research on occupational health in Nepal's higher education institutions (HEIs) should address several critical gaps and emerging challenges identified in both national and international literature.

Comprehensive Policy Analysis and Implementation Gaps

While Nepal has made progress in developing occupational health and safety (OHS) policies, including the National OSH Policy 2019 and the Labour Act 2017, there is a need to systematically assess how these policies are implemented within HEIs. Research should examine the extent to which institutional practices align with national standards and identify barriers to effective policy enforcement, particularly in academic and administrative environments.

Evaluation of Occupational Hazards in HEIs

Most existing research in Nepal focuses on traditional industries such as construction and manufacturing, highlighting hazards like chemical exposure, ergonomic risks, and psychosocial stressors (Lama et al., 2019; Mishra, 2020). However, HEIs present unique occupational risks, including indoor air quality issues, sick building syndrome, and mental health stressors linked to academic workloads (Mishra, Sudarsan, & Nithiyanantham, 2025). Future studies should utilize toxicological and ergonomic assessments to map these risks in university settings and propose tailored interventions.

Socio-Dynamic and Institutional Factors

Research should explore how socio-dynamic factors-such as gender, job role, and organizational culture-influence perceptions and practices of occupational safety among HEI staff and faculty (Ghimire, Mishra, & Bhaumik, 2023). This includes examining disparities in OHS awareness and the effectiveness of training programs across different academic departments.

Risk Assessment and Management Practices

Building on methodologies used in infrastructure and construction projects (Mishra, Sudarsan, & Nithiyanantham, 2023; Lama et al., 2019), future research should adapt risk assessment frameworks for the HEI context. This includes developing protocols for identifying, evaluating, and mitigating risks specific to laboratories, workshops, and office environments within universities.

Institutional Readiness and Capacity Building

There is a need to assess the capacity of HEIs to implement OHS initiatives, including the availability of trained personnel, emergency preparedness, and the integration of OHS into university curricula (Mishra, 2020; National OSH Profile for Nepal, 2022)²³. Research should also evaluate the effectiveness of ongoing training and awareness programs.

Mental Health and Psychosocial Risks

Given the high prevalence of stress, burnout, and psychosocial hazards in academic environments, future research should prioritize the identification and management of mental health risks among faculty,

staff, and students. This includes evaluating the impact of workload, job insecurity, and workplace culture on mental well-being (Ghimire, Mishra, & Bhaumik, 2023).

Comparative and Longitudinal Studies

Longitudinal and comparative studies are needed to track changes in occupational health outcomes over time and benchmark HEIs in Nepal against regional and international best practices (Mishra, Sudarsan, & Nithiyanantham, 2025).

Integration of Environmental and Occupational Health

Emerging research highlights the importance of integrating environmental health considerations, such as building materials and air quality, into occupational health frameworks for HEIs (Mishra, Sudarsan, & Nithiyanantham, 2025).

Conclusion

This analysis shows that occupational health in Nepalese higher education institutions (HEIs) is still developing, marked by fragmented practices, limited institutional mandates, and a lack of systematic enforcement. Although global models provide thorough frameworks based on integration, responsibility, and preventive care, Nepalese HEIs are still limited by poor infrastructure, budget constraints, cultural stigma surrounding mental health, and policy gaps in applying national standards into academic practice.

Though the Labour Act 2017 and the Occupational Health and Safety Policy 2019 are in place, these systems have not been properly implemented in educational environments. Furthermore, while progressive in its focus on quality assurance, digital transformation, and inclusivity, the Nurturing Excellence in Higher Education Program (NEHEP) lacks clear priority of occupational health and wellbeing as fundamental elements of institutional development. Most schools therefore run without occupational health units, certified safety officers, or organized mental health services, leaving faculty, staff, and students exposed to preventable health hazards.

The review emphasizes the critical need for a paradigm change—from reactive and compliance-based models to proactive, preventative, and holistic approaches that integrate occupational health into institutional governance, academic planning, and quality assurance systems—to solve these problems. This means not only changing policy tools but also creating inter-ministerial collaborations, capacity-building initiatives, and funding incentives to assist transformation at the institutional level.

Investing in occupational health is a strategic need for increasing institutional productivity, improving academic performance, keeping talented people, and guaranteeing student well-being, not only a question of legal compliance. A strong occupational health system in HEIs will directly support national education objectives and fit the vision of "Prosperous Nepal, Happy Nepali." HEIs have to start placing occupational health as a basic pillar of educational excellence, creativity, and equity going forward.

Recommendations

Drawing on the noted policy, practice, and governance deficiencies, this part presents a multi-level approach for transforming occupational health systems in Nepalese Higher Education Institutions (HEIs). The suggestions are organized around three main pillars: Institutional Reform, Policy and Governance

Alignment, and Capacity Building, each of which is vital to entrench occupational health as a strategic institutional goal.

Institutional Level

HEIs must internalize occupational health responsibilities through tangible actions and sustainable structures. Institutions should:

- **Establish Occupational Health Units (OHUs):** These should be staffed with trained occupational health professionals—including nurses, general physicians, psychologists, and safety officers—responsible for risk surveillance, preventive health programming, and emergency management.
- **Implement Preventive Health Services:** All campuses should offer annual health check-ups, vaccination drives, and basic medical screenings for faculty, administrative staff, and students, especially those in high-risk departments like science and engineering.
- **Institutionalize Mental Health Services:** Developing comprehensive mental health policies—including peer support networks, counseling services, and stress management workshops—will reduce stigma and address increasing psychological distress in academic environments (Shrestha&Karki, 2022).

These measures will foster a culture of wellness that enhances productivity, satisfaction, and retention of academic and administrative staff.

Policy and Governance

At the regulatory and national policy level, several key steps must be taken:

- **Amend and Expand Existing OHS Policies:** The Occupational Safety and Health Policy 2019 and Labour Act 2017 must be revised to explicitly include education institutions as a high-risk sector, with specific guidelines tailored to campus environments.
- **Mandate OHS Compliance in Quality Assurance (QAA):** The **University Grants Commission (UGC)** should revise its QAA criteria to include occupational health indicators, such as health audits, emergency preparedness plans, and mental health services.
- **Promote Inter-Ministerial Coordination:** Effective occupational health implementation in HEIs will require coordination among the Ministry of Education, Science and Technology (MoEST), Ministry of Labour, Employment and Social Security (MoLESS), and the Ministry of Health and Population (MoHP) to ensure regulatory alignment, funding allocation, and service integration. In Nepal's volatile political environment, characterized by diverse ideologies and coalition politics, the importance of KM becomes even more pronounced. The establishment of robust KM practices can be pivotal in maintaining continuity amidst frequent leadership changes(Gautam, Adhikari, & Lingden, 2024).
- **Encourage Occupational Health Research:** Research grants should be allocated for HEI-led studies on workplace health risks, digital fatigue, and psychosocial safety, helping to generate empirical evidence and policy innovations (Prajapati et al., 2023).

Capacity Building

Effective occupational health systems require skilled personnel and a health-conscious institutional culture. Recommended interventions include:

- **Training in Hazard Identification and Safety Response:** Faculty, technical staff, and administrative personnel should undergo regular training in risk recognition, chemical and lab safety, first aid, and fire response.
- **Mental Health First Response Training:** Appointing and training first responders who can identify and assist with emotional or psychological crises is critical in reducing institutional risk and harm.
- **Incorporate Occupational Health in CPD Programs:** Occupational health topics should be embedded in Continuous Professional Development (CPD) and faculty orientation programs. Modules should address ergonomics, digital safety, stress management, and gender sensitivity.

These efforts, when standardized across all HEIs, will strengthen institutional resilience and align with both NEHEP's governance reform goals and global occupational health frameworks like Total Worker Health® (NIOSH, 2015).

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