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Review

From credentialing to workforce development: A comparative review of certification and human resource development for South Korea's drug prevention and rehabilitation workforce

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Abstract: South Korea introduced a regulator-issued certification scheme for drug prevention education instructors and social rehabilitation counsellors in September 2024. This structured comparative policy review examines the scheme as a human resource management instrument, comparing it with arrangements in the United States, Canada, the United Kingdom, Australia and Japan, and with the International Certified Addiction Professional (ICAP) framework, across twelve workforce-lifecycle dimensions. It also synthesises empirical evidence linking credentialing, training, supervision and incentives to workforce and service outcomes. By 2026, Korea had established a legal basis, a cumulative curriculum, practical examinations, demand-based regional allocation and five-year certification validity. However, the scheme remains entry-focused. Supervised practice is limited, while structured post-certification coaching, implementation-fidelity monitoring and a career ladder were not documented in the reviewed sources. Detailed renewal requirements and conduct rules were not publicly available. For the 2024 intake, 5.7% of instructor and 1.2% of counsellor enrollees had completed certification at the reporting point, not final pass rates. Conversion of previously appointed instructors supplied 352 of 429 certified instructors (summed across two reporting dates). No mutual-recognition mechanism was identified between parallel prevention-education streams funded by the same regulator. International evidence, drawn largely from treatment settings, links certification to lower occupational turnover intentions, while evidence connecting credentials to client outcomes remains inconclusive. Continued coaching and supervision support skill maintenance. Proposed priorities include transparent operating rules, structured renewal, post-certification coaching, recognition of prior learning, tiered credentials, cross-stream coordination and routine workforce monitoring. These priorities outline a transition from entry-focused certification towards lifecycle-based workforce development.

Keywords: recognition of prior learning; continuing professional education; ability–motivation–opportunity model; staff turnover; implementation fidelity; clinical supervision; substance use; public health personnel

1. Introduction

The reported number of drug offenders in younger age groups increased substantially in the Republic of Korea. The number aged 10–29 years rose from 1,068 in 2013 to 6,285 in 2022, while the number aged under 20 years rose from 119 in 2017 to 481 in 2022 (Korean Association Against Drug Abuse [KAADA], 2024). KAADA (2024) also reported a decline in its prevention-education budget from approximately KRW 1.0 billion to KRW 0.26 billion. Earlier Korean analyses identified substantial gaps in treatment and rehabilitation infrastructure, including shortages of specialised personnel, facilities and funding (Kang et al., 2019; Ko,

2023; Yang, 2022). Policy measures introduced in 2023–2024 included provisions for workforce development. Amendments to the Narcotics Control Act created a statutory programme for misuse prevention and social rehabilitation that includes "the training and use of personnel" (Republic of Korea, 2024), and the Enforcement Decree named, for the first time, the "operation of a certification system" for these professionals (Republic of Korea, 2026b). In September 2024, the Ministry of Food and Drug Safety (MFDS) introduced a certification scheme for prevention education instructors and social rehabilitation counsellors (MFDS, 2026a).

Certification can serve as a human resource (HR) instrument for recognising whether practitioners meet specified requirements for knowledge, skills and experience. Its contribution to workforce and service outcomes, however, requires examination. Workforce shortages, turnover and gaps in preparation have been documented in the United States, England and Australia (Hoge et al., 2013; NHS England, 2024a; Skinner et al., 2020). A systematic review found limited and inconsistent evidence linking clinician and organisational workforce characteristics, including qualifications, experience and professional development, to treatment outcomes (van de Ven et al., 2020). These findings do not establish that certification is ineffective, but they caution against assuming that credentials alone ensure service quality. An HR perspective therefore requires certification to be examined alongside workforce planning, selection, development, deployment, reward, performance management and renewal, with attention to how these practices collectively support competence, motivation and retention.

The Korean literature identified for this review has primarily addressed treatment-and-protection arrangements, legislative reform and prevention education, leaving the integration of certification with broader HR practices insufficiently examined (Kang et al., 2019; Ko, 2023; Lee, 2025; Yang, 2022). This review addresses three questions. First, how does the Korean certification scheme compare with selected arrangements in five countries and the international ICAP framework across the workforce lifecycle? Second, what does international empirical evidence indicate about the relationships between HR practices and workforce and service outcomes in this field? Third, what development priorities emerge for the Korean scheme from these comparisons and findings? The analysis places particular emphasis on prevention education instructors, who account for two-thirds of the planned places in the 2026 certification programme (MFDS, 2026a), while examining social rehabilitation counsellors and parallel workforce streams for their implications for instructor workforce development.

1.1. Conceptual framework

The review draws on the ability–motivation–opportunity (AMO) perspective on HR management. Jiang et al. (2012) used meta-analysis to examine relationships between skill-enhancing, motivation-enhancing and opportunity-enhancing HR practices and organisational outcomes, including the roles of human capital, employee motivation and voluntary turnover. Applied to the present review, the ability dimension concerns the selection, training and assessment practices associated with certification, rather than the certificate itself. Motivation-enhancing practices include remuneration, feedback and performance management. The opportunity dimension is interpreted here as the arrangements that enable practitioners to deploy and develop their capabilities, including deployment, recognition of prior learning and career progression. These categories are not mutually exclusive: individual practices may serve more than one AMO function. Evidence from health care provides a rationale

for examining these practices together. West et al. (2002) reported associations between HR practices and patient mortality, while Garman et al. (2011) developed an evidence-informed model that situates management practices within a broader system of work practices.

Two hypothesised functions of credentials are distinguished. A competence function concerns whether credentialing selects or develops practitioners whose capabilities translate into better service outcomes. A retention function concerns whether credentialing supports continued participation in the field, potentially through professional recognition and commitment. The available evidence does not establish either function conclusively. Earlier studies reported substantial differences in effectiveness between counsellors that were not consistently explained by professional background (McLellan et al., 1988; Najavits and Weiss, 1994). Certification was associated with lower occupational turnover intentions in a survey of 929 counsellors (Rothrauff et al., 2011), but this finding does not establish an effect on actual retention. Workforce development is therefore considered at individual, organisational and structural levels, extending beyond the provision of training courses alone (Roche and Nicholas, 2017). These perspectives inform the analytical framework developed for this review (**Figure 1**). It comprises eight HR lifecycle stages, with workforce planning treated as a structural function and the remaining stages mapped to their primary AMO functions. The framework links HR practices to workforce and service outcomes through proposed mediating mechanisms and situates them within a governance layer encompassing legal basis, delegation, cross-stream recognition and transparency. It guides the comparative analysis rather than representing a causal model tested in this review.

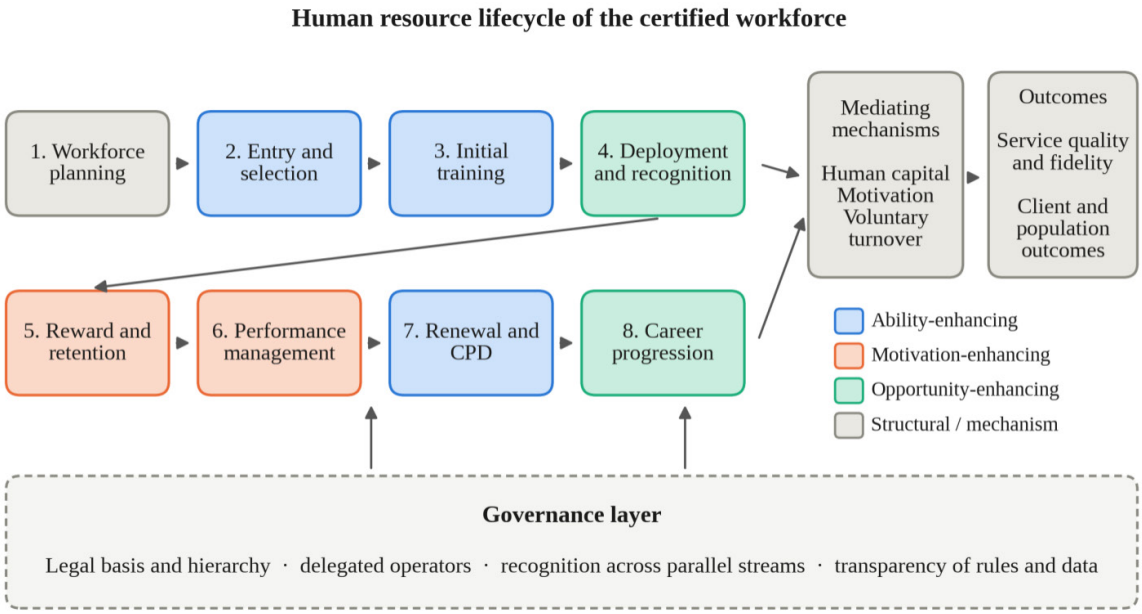


Figure 1. Analytical framework for the human resource lifecycle of the certified drug prevention and rehabilitation workforce. Workforce planning is shown as a structural function; the remaining lifecycle stages are coloured according to their primary ability–motivation–opportunity (AMO) function, while recognising that functions may overlap. Proposed mediating mechanisms connect HR practices with workforce and service outcomes. The governance layer encompasses the legal basis, delegation, cross-stream recognition and transparency across all stages. Arrows indicate the organisation of the framework and hypothesised relationships, not causal effects established by this review. Developed by the author, drawing on Jiang et al. (2012) and Roche and Nicholas (2017). CPD = continuing professional development.

2. Materials and methods

2.1. Design

The study is a structured comparative policy review combining documentary analysis of credentialing and workforce policies with a narrative synthesis of empirical evidence on workforce and service outcomes. This approach was chosen because the institutional arrangements under review are described in legal and administrative documents, whereas evidence linking related HR practices to outcomes is dispersed across health services research, implementation science and HR research. No new primary data were collected.

2.2. Selection of comparators

The Korean scheme was compared with arrangements in five countries and one international credentialing framework, selected to capture variation in regulatory and workforce-development approaches. The United States was included for its multiple credentialing bodies, tiered national credentials and reciprocity arrangements (IC&RC, 2024; NCC AP, n.d.). Canada was included for its voluntary national certification and variation in provincial regulation (Canadian Addiction Counsellors Certification Federation [CACCF], n.d.-a; Slipp et al., 2025). The United Kingdom comparison covered professional-body accreditation based on occupational standards, alongside the workforce strategy applicable to England (Addiction Professionals, n.d.; NHS England, 2024a). Australia was included for minimum-qualification policies operating in selected states and territories (Skinner et al., 2021; Victorian Department of Health, 2006). Japan provided an East Asian example in which designated training is linked to institutional designation and reimbursement, offering a contrast to individual certification (Ministry of Health, Labour and Welfare [MHLW], 2017). The International Certified Addiction Professional (ICAP) framework was included as a transnational credentialing arrangement linked to Colombo Plan training initiatives (International Society of Substance Use Professionals [ISSUP], n.d.). Hong Kong, Taiwan, Malaysia and Singapore were also considered during preliminary screening but were not included in the core comparison because no formal individual credential for this workforce was identified (e.g., Narcotics Division, 2024). The selected arrangements cover different occupational groups and regulatory levels; they are compared as alternative approaches to workforce development rather than as equivalent credentials.

2.3. Sources

For Korea, the principal documentary sources were the versions of the Narcotics Control Act in force in February 2024 and August 2026 (Republic of Korea, 2024, 2026a), its Enforcement Decree (Republic of Korea, 2026b), MFDS Notice No. 2024-14 concerning programme delegation (MFDS, 2024), the MFDS press release of 13 May 2026 (MFDS, 2026a), the official programme announcements for 2025 and 2026, the publicly available programme FAQs (MFDS, 2025, 2026b, 2026c), and KAADA policy forum proceedings reporting programme data for 2024 (KAADA, 2024); these proceedings were distributed to forum participants and are not publicly available. Announcements from the Korean Pharmaceutical Association (KPA) and the Ministry of Health and Welfare (MOHW), together with professional press reports, were used to describe parallel workforce streams. For the international comparison, credential handbooks, codes of ethics, competency frameworks and workforce strategies were obtained from the websites of the relevant credentialing bodies and public agencies.

Empirical studies were identified through targeted searches of PubMed, Google Scholar and the Korea Citation Index conducted in September 2026 and covering publications from January 1985 to September 2026. The searches combined workforce terms (counsel*, instructor, workforce, staff, practitioner) with field terms (substance use, addiction, drug prevention, alcohol and other drugs) and with terms for the practice or outcome of interest (certification, credential*, licens*, training, supervision, incentive, pay for performance, turnover, retention, burnout, fidelity, implementation); Korean equivalents (마약류 , 중독 , 예방교육 , 전문인력 , 자격 , 인증 , 이직) were used for the Korea Citation Index. The reference lists of retrieved articles and reviews were screened for further studies.

Studies were included when they concerned the substance use prevention, treatment or rehabilitation workforce; reported empirical findings on a human resource practice (credentialing, training, supervision, incentives, implementation support or organisational conditions) in relation to a workforce or service outcome; and were published in English or Korean as a peer-reviewed article or an official workforce report. Studies were excluded when they examined clinical effectiveness without a workforce component, concerned workforces outside the substance use field except where used as a conceptual reference, or were available only as conference abstracts. Priority was given to systematic reviews, randomised trials and longitudinal studies, and where several studies reported the same finding the most comprehensive or most recent was retained. The synthesis is therefore selective rather than exhaustive, and no formal quality appraisal or risk-of-bias assessment was undertaken.

The review draws on 35 policy and institutional documents (13 Korean and 22 international) and 40 peer-reviewed articles, together with four Korean professional press reports used only for contextual information on parallel workforce streams. Thirty-two of these sources provide the empirical evidence summarised in **Table 3**.

2.4. Analysis

Each comparator arrangement was coded across twelve dimensions used to operationalise the workforce-lifecycle and governance framework: credential or mechanism; tiers; entry requirements; didactic training; supervised practice; assessment; issuing and operating bodies; legal status; validity and continuing professional development (CPD); codes of ethics and sanctions; linkage to funding or scope of practice; and scale. Two categories of information gaps were distinguished. An attribute was coded as “not documented” when the consulted sources did not describe it, and as “not publicly available” when public sources indicated that it was governed by internal operating guidelines whose relevant provisions were not publicly accessible. Neither category was treated as evidence that the attribute was absent. Empirical studies were coded by construct (turnover, burnout, caseload, supervision, training, incentives, implementation support, fidelity, and relationships between credentials and outcomes) and setting, and synthesised narratively. Interpretation distinguished actual turnover from turnover intentions, and practitioner knowledge, skills and implementation fidelity from client and population outcomes. Information was extracted by the author into a structured matrix with one row per arrangement and one column per dimension, each cell recording the attribute, its source and the date of that source. Korean entries were checked against at least two independent public sources where available, for example the press release and the corresponding programme announcement, and where sources of different dates differed, the most recent official document was used, with the earlier provision retained wherever the

manuscript compares periods. Quantitative programme data were re-checked against the original source and are reported with their reporting dates. In addition, statements about the Korean scheme were checked against a summary of the publicly posted programme details, which the Korea Institute of Drug Safety and Risk Management (KIDS), the operator of the certification scheme, prepared on request; this summary was used only for verification, and each statement is cited to a public source or to KAADA (2024). Bibliographic details, including volume, issue, pages and digital object identifiers, were verified against publisher records. Apart from the KAADA (2024) proceedings and the KIDS summary used for verification, the study used publicly available documents. It did not involve human participants; ethical approval was therefore not required.

3. Results

3.1. Legal and institutional design of the Korean scheme

The Act provides the statutory basis for the programme, while certification is explicitly addressed in the Enforcement Decree. Article 51-2 of the Narcotics Control Act, inserted by Act No. 19648 and in force from 17 February 2024, requires the MFDS to conduct misuse prevention, social rehabilitation and "the training and use of personnel related to social rehabilitation", and allows these tasks to be delegated (Republic of Korea, 2024). The word "certification" does not appear in the Act. It first appears in Article 20-2(1) of the Enforcement Decree, inserted in January 2024, which lists the "operation of a certification system for professionals in misuse prevention and social rehabilitation" among the tasks the MFDS may perform (Republic of Korea, 2026b). Article 20-4 of the Decree and MFDS Notice No. 2024-14 delegate the operation of the certification system to the Korea Institute of Drug Safety and Risk Management (KIDS) and the development and delivery of training to KAADA (MFDS, 2024). An amendment of April 2025 renumbered the relevant paragraphs; in the current Act the delegation clause is Article 51-2(7) (Republic of Korea, 2026a). Neither the Act nor the Decree specifies entry requirements, validity, renewal or grounds for revocation. By contrast, the same Decree specifies the qualifications, two-year term and grounds for dismissal of honorary drug-control monitors (Article 20-6). Earlier bills to create a statutory qualification for relapse-prevention educators were introduced in 2019 and 2022 but did not proceed (Yang, 2022).

Governance responsibilities are distributed among three bodies. The MFDS holds overall responsibility and prepares workforce plans. KIDS operates certification through a certification operation and evaluation committee. KAADA manages the curricula through a curriculum evaluation advisory group and lecture coordination meetings, and deploys certified staff (KAADA, 2024). The basic course comprises 80 units (chasi) of online training, is open to holders of a junior-college degree or higher, and awards a course-completion certificate rather than professional certification. The instructor and counsellor courses comprise 110 and 140 units of online training, respectively (MFDS, 2026a, 2026b). In the 2024–2025 curriculum, ethics was covered in two lectures within the instructor curriculum (KAADA, 2024). The 2026 curriculum lists no dedicated ethics lecture in the instructor track, and ethics-related content appears within the counsellor module on confidentiality and decision-making (MFDS, 2026b). Professional certificates are valid for five years, with recertification following refresher training taken six months before expiry (MFDS, 2026a). A separate conversion route allowed instructors already appointed by KAADA to obtain the instructor certificate by completing 110 units of online training and an online

examination, without a practicum (MFDS, 2025). From 2027, certification becomes a requirement for working as a KAADA prevention instructor (MFDS, 2026c).

The scheme was substantially revised for the 2026 intake. Nationwide selection was replaced by regional allocation based on the demand of 17 rehabilitation centres, with 100 instructor and 50 counsellor places distributed across 16 regions. Instructor allocations ranged from 2 places each in Gwangju and North Gyeongsang to 18 in North Jeolla (MFDS, 2026a). The revised pathway includes one compulsory day of in-person training (6 hours). The written examination was expanded from 50 to 100 items; candidates scoring at least 60 are ranked within their selected region, with up to twice the regional quota proceeding to the practical examination. The practical examination comprises a teaching demonstration of up to 10 minutes for instructors and case conceptualisation and a simulated counselling session of up to 15 minutes for counsellors (MFDS, 2026b). According to the official FAQs, 6 hours of in-person training and 4 hours allocated to practical assessment were reclassified from the practicum as preceding components, leaving practicum requirements of 10 hours for instructors and 70 hours for counsellors, compared with 20 and 80 hours previously (MFDS, 2026c). Candidates must select one region for subsequent practice, although the practicum may be completed in another region, and must complete the practicum within two years of passing the practical examination (MFDS, 2026b, 2026c). The existing re-sit route will end after 2026; from 2027, unsuccessful candidates must reapply as new applicants (MFDS, 2026b).

3.2. Comparison across the workforce lifecycle

Table 1 compares entry requirements and initial professional development, while **Table 2** compares governance, credential maintenance and scale for Korea and the six comparator arrangements.

Table 1. Entry and initial development of the drug prevention and rehabilitation workforce: the Republic of Korea compared with six other arrangements.

Country/ Framework	Credential and tiers	Entry requirement	Didactic training	Practice experience and supervision requirements	Assessment
Republic of Korea	Two regulator-issued certificates (prevention education instructor; social rehabilitation counsellor), one level per role; nested curriculum (basic 80 units; instructor 110 units; counsellor 140 units); conversion route for KAADA-appointed instructors	Any one of: related bachelor's degree; relevant licence or national qualification; 3 years' relevant experience. From 2026, one region nominated, with subsequent practice limited to it	110 units (instructor) or 140 units (counsellor) of online training; from 2026, one compulsory in-person day (6 h)	20 h (instructor) and 80 h (counsellor); 10 h and 70 h from 2026, to be completed within 2 years of passing the practical examination	Written examination (50 items, pass 70; from 2026, 100 items, minimum 60, regional ranking to 2× quota); practical examination from 2026; existing re-sit route ends after 2026; unsuccessful candidates must reapply as new applicants from 2027

Continuation Table:

Country/ Framework	Credential and tiers	Entry requirement	Didactic training	Practice experience and supervision requirements	Assessment
United States	NCC AP: NCAC I, NCAC II, MAC, plus supervisor (NCSE) and peer (NCPRSS) credentials; IC&RC credentials incl. Prevention Specialist	NCAC I: secondary education; NCAC II: bachelor's; MAC: master's; NCPRSS: 2 years in recovery	270 (NCAC I), 450 (NCAC II), 500 (MAC) contact hours	6,000 supervised hours (NCAC I/II, MAC); 10,000 h (NCSE)	National examinations; IC&RC Prevention Specialist examination based on a 2022 job analysis with six weighted domains
Canada	Voluntary CACCF certifications, incl. a clinical-supervisor credential (CCS-AC); CCSA competencies at four proficiency levels	CCS-AC: 4,000 h of addiction practice	30 h of supervision education (CCS-AC)	800 h providing direct clinical supervision within the previous 5 years (CCS-AC)	IC&RC-based examination
United Kingdom	Drug and Alcohol Professional Certificate (Registration, Accreditation) on a voluntary register; NHS England capability framework covering 15 roles (2024)	Employment in the sector	No fixed hours; nine mandatory National Occupational Standards units plus one optional	Workplace practice; no hour threshold documented	Portfolio-based workplace assessment
Australia	Vocational qualification pathway with minimum-qualification policies in Victoria and the ACT	Certificate IV in AOD, or four core units for degree holders (Victoria)	Nationally accredited vocational qualification	Embedded in the qualification	Competency-based vocational assessment
Japan	Institution-based training requirements rather than a separate individual addiction credential; completion of designated national training is a staffing criterion for specialist institutions	Base profession (physician, nurse, occupational therapist, psychiatric social worker, psychologist)	Designated courses, e.g. SMARPP group-therapy facilitator training	Practice in designated institutions; no threshold documented	Course completion; no examination documented

Continuation Table:

Country/ Framework	Credential and tiers	Entry requirement	Didactic training	Practice experience and supervision requirements	Assessment
International (ICAP)	Prevention I–II; Treatment I–IV; Recovery Support, via Colombo Plan / UNODC curricula	Prevention I: bachelor's degree	120 h (Prevention I); 240 h (Prevention II)	3,000 h experience incl. 150 h supervised (Prevention I); 7,500 h incl. 300 h (Prevention II)	ICAP examinations

Sources: Republic of Korea: MFDS (2025, 2026a, 2026b, 2026c), KAADA (2024); United States: NCC AP (n.d.), IC&RC (2024); Canada: CACCF (n.d.-a), CCSA (2023); United Kingdom: Addiction Professionals (n.d.), NHS England (2024b); Australia: Victorian Department of Health (2006), Skinner et al. (2021); Japan: MHLW (2017), NCNP (2024a); ICAP: ISSUP (n.d.). The arrangements compared cover different occupational groups and levels of regulation, and they are set out as alternative approaches to workforce development rather than as equivalent credentials. Training units, work-experience requirements and supervised-practice hours are defined differently across jurisdictions and are not directly equivalent. Korean training is counted in instructional units (chasi), not clock hours. ACT = Australian Capital Territory; AOD = alcohol and other drugs; CACCF = Canadian Addiction Counsellors Certification Federation; CCS-AC = Canadian Clinical Supervisor–Addiction Counsellor; CCSA = Canadian Centre on Substance Use and Addiction; IC&RC = International Certification & Reciprocity Consortium; ICAP = International Certified Addiction Professional; KAADA = Korean Association Against Drug Abuse; MAC = Master Addiction Counselor; NCAC = National Certified Addiction Counselor; NCC AP = National Certification Commission for Addiction Professionals; NCPRSS = National Certified Peer Recovery Support Specialist; NCSE = National Clinical Supervision Endorsement; SMARPP = Serigaya Methamphetamine Relapse Prevention Program.

3.2.1. Workforce planning

Korea's 2026 regional allocation links certification places to regional demand and the existing distribution of professionals (MFDS, 2026c). International comparators illustrate complementary approaches to generating information for workforce planning. England has a national census of the drug and alcohol treatment and recovery workforce and a ten-year workforce strategy (NHS England, 2024a). Australia's national workforce survey reports qualifications, supervision coverage and intentions to leave (Skinner et al., 2020). In the United States, research has mapped state-level variation in credentialing, training, supervision and Medicaid reimbursement for addiction counsellors, providing information on the regulatory conditions shaping workforce development (Zerden et al., 2025). Korea's Act requires a triennial national survey of drug use and prevention, treatment and rehabilitation services (Republic of Korea, 2026a, Article 51-4). However, a dedicated workforce module within that survey was not identified in the public sources reviewed.

3.2.2. Entry, selection and initial training

Korea offers three alternative eligibility routes: a related bachelor's degree, a relevant licence or national qualification, or three years of relevant experience (MFDS, 2026a). A single credential level is awarded per role. In the United States, NCC AP offers credentials differentiated by education and experience, including NCAC I, NCAC II and the Master Addiction Counselor, alongside credentials for supervisors and peer specialists. NCAC I requires secondary education or higher, a current relevant credential or licence, at least three years of full-time or 6,000

hours of supervised counselling experience, and 270 contact hours of education and training (NCC AP, n.d.). The IC&RC prevention specialist examination is based on a published job analysis with six weighted performance domains (IC&RC, 2024). ICAP Prevention I specifies 3,000 hours of work experience and 150 hours of supervised practical experience, while Prevention II specifies 7,500 and 300 hours, respectively (ISSUP, n.d.). Korea's 110 units of online instructor training are counted in instructional units rather than clock hours and are therefore not directly comparable with the 120-hour education requirement for ICAP Prevention I. The Korean instructor practicum comprises 10 hours, and a common work-experience requirement does not apply across all three eligibility routes. These differences concern the structure of entry and practical preparation; total work experience and supervised practicum hours should not be treated as equivalent measures. A published job analysis underpinning the Korean examinations was not identified in the sources reviewed.

Table 2. Governance, credential maintenance and reported workforce indicators across the comparator arrangements.

Country/ Framework	Issuing body and legal status	Validity and CPD	Code of ethics and sanctions	Linkage to funding or practice	Reported workforce indicators
Republic of Korea	Certified by the Minister of Food and Drug Safety; operated by KIDS, curriculum by KAADA (MFDS Notice 2024-14). Named only in the Enforcement Decree (art. 20-2); requirements, validity and revocation not set in Act or Decree	5 years; recertification after refresher training taken six months before expiry. Detailed refresher-training content and hours not publicly available.	Two lectures on ethics in the 2024–2025 curriculum; no dedicated ethics lecture in the 2026 instructor curriculum; code of conduct and grounds for revocation not publicly available.	Registration with KAADA for deployment; from 2027 the certificate conditions KAADA instructor work; no remuneration or reimbursement linkage documented	2024 intake: 77/1,360 instructor (5.7%) and 11/906 counsellor (1.2%) enrollees certified; 352 instructors converted
United States	Non-governmental bodies (NCC AP; IC&RC member boards) with reciprocity; state licensure varies	Continuing-education based renewal	NAADAC/NCC AP Code of Ethics (2021), nine principles	Interacts with state rules and Medicaid reimbursement	Persistent national shortages of addiction counsellors
Canada	CACCF; voluntary certification, with provincial variation in professional regulation.	20 h continuing education per year (CCS-AC)	CACCF code of ethics and public complaints process; specific sanctions not assessed in this review.	No funding linkage documented	Not documented
United Kingdom	Professional body (Addiction Professionals); no statutory registration; national frameworks by NHS England and OHID	3 years	Voluntary register maintained by the professional body	Commissioning standard requires safe caseloads, supervision, training plans and CPD records	Frontline turnover 25% (2023); 10-year workforce plan (2024–2034)

Continuation Table:

Country/ Framework	Issuing body and legal status	Validity and CPD	Code of ethics and sanctions	Linkage to funding or practice	Reported workforce indicators
Australia	State health departments; vocational sector	Qualification does not expire	Not applicable	Applies within state-funded AOD services (Victoria, ACT)	National survey (n = 1,506): about one-third of client-service staff hold no AOD qualification
Japan	MHLW designates institutions; NCNP and national centre deliver training	Not documented	Codes of the base professions	Completion satisfies the facility standard for billing addiction group therapy	About 815 trainees to 2019; more than 1,300 SMARPP facilitators trained since 2009
International (ICAP)	ICUDDR Center for Credentialing and Accreditation; no jurisdictional force	3 years, with continuing education	Agreement to comply with the applicable professional code of ethics is required; specific sanctions not assessed in this review.	No direct funding or statutory scope-of-practice linkage identified in the sources reviewed.	Total number of ICAP credential holders not established in this review.

Sources: as for **Table 1**, plus Republic of Korea (2024, 2026a, 2026b), MFDS (2024), NAADAC and NCC AP (2021), Hoge et al. (2013), Zerden et al. (2025), Slipp et al. (2025), OHID (2022), NHS England (2024a), Skinner et al. (2020), NCNP (2024b), CACCF (2022, n.d.-b) and ICUDDR (n.d.).

"Not documented" indicates that the consulted sources did not describe the attribute. "Not publicly available" indicates that public sources identified relevant internal operating guidelines, but their applicable provisions were not publicly accessible. Neither designation establishes that the attribute is absent. The arrangements compared cover different occupational groups and levels of regulation, and the requirements summarised here, including validity periods and continuing professional development, are not directly equivalent. Workforce indicators differ in population, reference period and measure and should not be interpreted as directly comparable estimates of certified workforce size. NHS England and OHID frameworks apply to England.

CPD = continuing professional development; KIDS = Korea Institute of Drug Safety and Risk Management; MHLW = Ministry of Health, Labour and Welfare; NCNP = National Center of Neurology and Psychiatry; OHID = Office for Health Improvement and Disparities; ICUDDR = International Consortium of Universities for Drug Demand Reduction. Other abbreviations as in **Table 1**.

3.2.3. Deployment, recognition and reward

Certified Korean professionals register with KAADA and may be deployed to settings appropriate to their roles, including schools and military units for prevention education, and rehabilitation centres, probation offices and prisons for rehabilitation services (MFDS, 2026a). The requirement to select a single region links deployment to workforce planning while restricting subsequent practice within the scheme to

the selected region, although the practicum itself may be completed in another region (MFDS, 2026b, 2026c). No formal mechanism for recognising training completed through other programmes, or explicit linkage between certification and remuneration or reimbursement, was identified in the sources reviewed. IC&RC facilitates credential reciprocity among member boards, subject to the receiving board's requirements; this concerns recognition of credentials rather than automatic recognition of training completed in other programmes (IC&RC, n.d.). Japan links designated training to specialist institutional designation and eligibility to bill for addiction group therapy (MHLW, 2017; National Center of Neurology and Psychiatry [NCNP], 2024a). In England, the commissioning quality standard specifies safe caseloads, regular supervision, dedicated funding for workforce training and development, and evidence of CPD and compliance with supervision standards (Office for Health Improvement and Disparities [OHID], 2022).

3.2.4. Renewal, conduct and career progression

Korea's scheme has included a five-year validity period from the outset, establishing a formal renewal point. Australian vocational qualifications used in minimum-qualification policies, by comparison, do not expire (Victorian Department of Health, 2006). The content and hours of the Korean refresher training are not publicly available; the first renewals will fall due in 2029. ICAP credentials must be renewed every three years with continuing education (ISSUP, n.d.). Canadian certified clinical supervisors must complete 20 hours of continuing education a year (CACCF, n.d.-a). The United Kingdom's Drug and Alcohol Professional Certificate is valid for three years (Addiction Professionals, n.d.). In the United States, NAADAC and NCC AP have published a code of ethics organised around nine principles (NAADAC and NCC AP, 2021). In Korea, a code of conduct and disciplinary procedures for certificate holders are not publicly available. The Korean certification scheme also has no differentiated senior, supervisor or trainer level. The United States and Canada, by contrast, offer separate credentials for clinical supervisors (CACCF, n.d.-a; NCC AP, n.d.).

3.3. Evidence on workforce and service outcomes

Table 3 summarises the empirical evidence. Four patterns are relevant to the Korean design.

Table 3. Empirical evidence on human resource practices and workforce and service outcomes in the substance use field.

Construct	Setting	Principal finding	Source
Staff turnover	United States	Annual turnover from organisational records: 33.2% (counsellors), 23.4% (clinical supervisors); perceived justice and organisational support were associated with lower voluntary turnover	Eby et al. (2010); Eby and Rothrauff-Laschober (2012)
Staff turnover	England	Frontline turnover rose from 19% (2022) to 25% (2023)	NHS England (2024a)
Intention to leave	Australia	23% intended to leave their job and 14% the sector within 12 months; burnout, workload and pay were the leading reasons	Skinner et al. (2020)

Continuation Table:

Construct	Setting	Principal finding	Source
Caseload	England	Caseloads of 50–80, sometimes 100, against a benchmark of 40 or fewer	Black (2021)
Caseload	Republic of Korea	About 50 clients per case manager, up to 100 in some centres	Choi (2026)
Workforce problems	Republic of Korea	Experts described staff shortage, an unrewarded field, administrative overload, lack of supervisors and weak credential management	Kang et al. (2019)
Burnout	Poland; Australia	Exhaustion in 62% of 452 therapists, with organisational factors dominant; 15.6% burnt out among 886 AOD workers	Klingemann et al. (2024); Skinner and Roche (2021)
Supervision and retention	United States	Supervision negatively associated with emotional exhaustion and turnover intention; organisational and occupational commitment statistically mediated the association between supervision quality and emotional exhaustion.	Knudsen et al. (2008, 2013)
HR management practices	United States	Performance-based rewards and support for creativity were associated with lower turnover intention.	Knudsen et al. (2003)
Certification and occupational turnover intention	United States	Certification predicted lower intention to leave the occupation among 929 counsellors	Rothrauff et al. (2011)
Credential and outcome	Systematic review	12 of 1,317 records examined clinician characteristics against outcomes; no strong association in any direction	van de Ven et al. (2020)
Counsellor effects	United States	Client outcomes differed between counsellors; interpersonal skill and empathy were relevant, while formal qualifications did not consistently explain these differences.	McLellan et al. (1988); Najavits and Weiss (1994); Moyers and Miller (2013)
Workshop training	United States	Workshops raised knowledge and self-reported skill, but observed skills faded without follow-up	Miller and Mount (2001); Walters et al. (2005)
Post-training coaching	United States; meta-analysis	Feedback and coaching added proficiency (RCT, n = 140); in motivational interviewing studies, an average of three to four feedback/coaching sessions over 6 months sustained skills.	Miller et al. (2004); Schwalbe et al. (2014)
Supervised casework	United States	Seminar plus supervised casework outperformed a manual alone	Sholomskas et al. (2005)

Continuation Table:

Construct	Setting	Principal finding	Source
Train-the-trainer	United States	Train-the-trainer and expert-led training both outperformed self-study, with few differences between them	Martino et al. (2011)
Pay for performance	United States	Demonstrated A-CRA competence was higher with performance incentives than under control conditions (24.0% vs 8.9%); patient remission did not differ significantly.	Garner et al. (2012)
Implementation facilitation	United States	Facilitation added to technology transfer improved implementation and reduced client substance use (39 organisations)	Garner et al. (2020)
Turnover and investment	United States	Agencies with turnover in key positions more often dropped out of technology-transfer programmes	Squires et al. (2008)
Prevention fidelity	United States	Implementation level affects outcomes; training alone insufficient for fidelity; repetition did not improve fidelity over 3 years	Durlak and DuPre (2008); Dusenbury et al. (2003); Ringwalt et al. (2010)
Prevention curriculum training	Peru	Schools receiving staff training showed reduced student smoking relative to controls; no significant reductions in alcohol or illicit drug use were detected.	Paschall et al. (2022)
Online treatment training	Philippines	Knowledge scores improved; post-test scores did not differ significantly between online and face-to-face participants.	Felipe et al. (2022)
Prevention workforce composition	Japan	Of 27,499 school instructor requests, 32.9% went to police staff and 31.4% to pharmacists	MEXT (2022), cited in Lee (2025)

Findings are reported at the level stated by the original authors and are grouped by construct rather than ranked by strength of design. AOD = alcohol and other drugs; HR = human resource; MEXT = Ministry of Education, Culture, Sports, Science and Technology (Japan); RCT = randomised controlled trial; A-CRA = Adolescent Community Reinforcement Approach.

First, high turnover is reported across settings and is associated with organisational conditions. Annual turnover measured from organisational records in a US study was 33.2% for counsellors and 23.4% for clinical supervisors (Eby et al., 2010), and frontline turnover in England reached 25% in 2023 (NHS England, 2024a). Perceived justice and organisational support were associated with a lower risk of voluntary turnover (Eby and Rothrauff-Laschober, 2012). Clinical supervision was negatively associated with emotional exhaustion and turnover intention (Knudsen et al., 2008). A separate analysis identified organisational and occupational commitment as statistical mediators of the association between supervision quality and emotional exhaustion (Knudsen et al., 2013). Performance-based rewards and support for creativity were associated with lower turnover intention (Knudsen et al., 2003), and

organisational factors explained more variance in burnout than individual factors (Klingemann et al., 2024). Turnover also has organisational consequences, including increased demands on remaining staff (Knight et al., 2012). Agencies experiencing turnover in key positions were more likely to discontinue technology-transfer programmes (Squires et al., 2008). In Korea, experts in addiction treatment described the field as demanding and inadequately rewarded, with excessive administrative workload, a lack of supervisors and weak management of professional credentials (Kang et al., 2019).

Second, the evidence distinguishes associations with occupational turnover intention from associations with treatment outcomes. A systematic review screened 1,317 records and included 12 studies examining relationships between workforce characteristics and treatment outcomes, finding no strong evidence of associations in either direction (van de Ven et al., 2020). Studies have reported substantial differences in client outcomes between counsellors and highlighted the relevance of interpersonal skill and accurate empathy, without establishing formal qualifications as a consistent explanation for those differences (McLellan et al., 1988; Moyers and Miller, 2013; Najavits and Weiss, 1994). Certification was associated with lower intention to leave the occupation among 929 counsellors (Rothrauff et al., 2011). This finding concerns occupational turnover intention rather than observed retention.

Third, training alone does not reliably produce sustained improvements in practice. In a small study, self-reported skill rose after a workshop while observed practice changed only modestly (Miller and Mount, 2001). Across 17 evaluations, workshops improved knowledge and attitudes, but skill gains were rarely maintained without follow-up consultation, supervision or feedback (Walters et al., 2005). In a randomised trial of 140 clinicians, feedback and coaching improved proficiency beyond workshop training alone, and clinicians' self-reports were unrelated to observed proficiency (Miller et al., 2004). A meta-analysis of motivational interviewing training found that skills declined without follow-up support, whereas an average of three to four feedback or coaching sessions over six months sustained skills (Schwalbe et al., 2014). Training that included supervised casework outperformed a manual alone (Sholomskas et al., 2005). Train-the-trainer delivery with supervision produced outcomes similar to expert-led training (Martino et al., 2011). In a cluster-randomised trial, therapists receiving performance incentives were more likely to demonstrate competence in the Adolescent Community Reinforcement Approach than those in the control condition (24.0% vs 8.9%), although patient remission did not differ significantly between conditions (Garner et al., 2012). In another cluster-randomised trial conducted in HIV community-based organisations, adding implementation and sustainment facilitation to standard technology transfer improved implementation and clients' substance use outcomes (Garner et al., 2020).

Fourth, prevention outcomes are related to how programmes are delivered. A review covering hundreds of studies found that implementation level was related to programme outcomes (Durlak and DuPre, 2008). A review of school-based prevention research documented incomplete curriculum delivery and found that training alone was insufficient to ensure fidelity (Dusenbury et al., 2003). Repeated delivery also did not reliably improve fidelity over three years (Ringwalt et al., 2010). Evidence linking prevention workforce training to participant outcomes is limited but emerging. In a cluster-randomised trial in Peru, schools whose staff received Universal Prevention Curriculum training showed reductions in student smoking relative to control schools, but no significant reductions in alcohol or illicit drug use were detected (Paschall

et al., 2022). A separate study of an online adaptation of the Universal Treatment Curriculum in the Philippines reported improved knowledge scores and no significant difference in post-test scores between online and face-to-face participants (Felipe et al., 2022). The latter study concerns learning outcomes in treatment training rather than prevention or population-level outcomes.

3.4. The Korean certification pipeline and parallel workforce streams

Programme data for the 2024 intake show the number of candidates reaching each certification stage at the reporting point (**Figure 2**). Of 1,360 enrolled instructor candidates, 961 (70.7%) completed online training, 97 (10.1% of training completers) passed the certification examination, and 77 had completed the practicum by the reporting date, representing 5.7% of the initial enrollees. Of 906 counsellor candidates, 582 (64.2%) completed training, 49 (8.4% of training completers) passed the examination, and 11 had completed the 80-hour practicum, representing 22.4% of examination passers and 1.2% of the initial enrollees (KAADA, 2024). These proportions describe the candidates who had completed certification at the reporting point and are not final pass rates for the cohort. Through the conversion route, 352 of 813 previously appointed instructors had obtained certification by 12 December 2024, whereas the 77 new-entry instructors described above were counted on 25 October 2024 (KAADA, 2024). The source reports these two counts separately, on different dates, and does not give a combined total. Adding them gives 429 certified instructors, of whom 352 (82.1%) entered through the conversion route. This figure of 429 was calculated for this review by combining counts from two reporting dates; it is not a single-date official total.

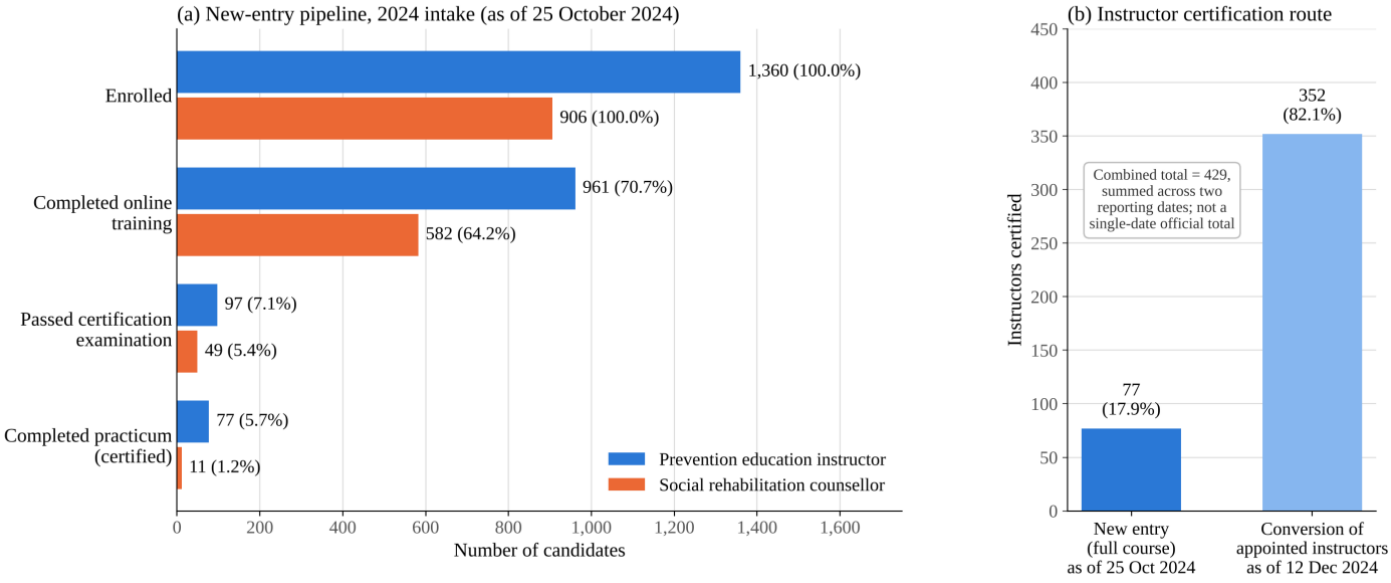


Figure 2. Certification progress and routes for the 2024 intake. (a) Numbers reaching each stage through the new-entry route as of 25 October 2024, with percentages calculated using the initial enrolment for each role: 1,360 prevention education instructor candidates and 906 social rehabilitation counsellor candidates. (b) Certified instructors by route: new entry (n = 77; 17.9%) as of 25 October 2024 and conversion of previously appointed KAADA instructors (n = 352; 82.1%) as of 12 December 2024. Percentages refer to a total of 429, which was calculated for this review by combining counts from these two reporting dates and is not a single-date official total. Counts reflect progress at the reporting point. Source: KAADA (2024).

Parallel workforce streams operate under both the MFDS and the MOHW (**Table 4**). Since 2018, the KPA's Medication Safety Movement Headquarters has delivered the MFDS "Know Your Medicines Right" programme through pharmacist instructors in 16 regional chapters. In 2025, the programme delivered 1,827 sessions reaching 52,183 people (KPA Medication Safety Movement Headquarters, 2026). It serves six target groups and includes drug misuse among its topics (KPA, 2024). The Seoul chapter alone deployed 199 instructors in 2026, with prescription controlled drugs and adolescent overdose as priorities (Medipana News, 2026). The KPA has announced its intention to introduce its own instructor certification (KPA, 2025). Separately, the MOHW is developing a curriculum and considering certification for staff of designated treatment-and-protection hospitals, with 80 trainees planned for 2026 (MOHW, 2025; Newspim, 2026). No mechanism for recognising training across these streams was identified in the reviewed sources. The MFDS scheme's conversion route was restricted to previously appointed KAADA instructors (MFDS, 2025). Reporting from a 2026 policy forum described the departure of pharmacist instructors with more than a decade of experience following the introduction of certification. KAADA acknowledged that some existing instructors had been unable to complete the required training alongside their pharmacy work (Kim, 2026). For comparison, Japanese data indicate that pharmacists accounted for 31.4% of requests for school drug-prevention instructors, second only to police staff at 32.9% (MEXT, 2022, cited in Lee, 2025).

Table 4. Parallel drug prevention and rehabilitation workforce streams in the Republic of Korea.

Attribute	MFDS-certified workforce	Pharmacist medication-safety instructors	Treatment-setting workforce
Funding ministry and programme	MFDS; certification scheme since September 2024	MFDS "Know Your Medicines Right" support programme, since 2018	MOHW; training for designated treatment-and-protection hospitals
Operator	KIDS (certification); KAADA (curriculum, deployment)	KPA Medication Safety Movement Headquarters, 16 regional chapters	Contracted curriculum developer (2025)
Workforce and entry	Related bachelor's degree, relevant licence or national qualification (including pharmacist licensure), or 3 years' relevant experience	Licensed pharmacists who are association members	Physicians, nurses and mental health professionals
Initial training	110 units (instructors) or 140 units (counsellors) of online training; one compulsory in-person day (6 h); written and practical examinations; practicum of 10 h (instructors) or 70 h (counsellors), from 2026	Online course, advanced session and regional instructor workshops	Curriculum under development
Credential and validity	MFDS certificate, 5 years	None; association-level certification announced	None; certification under consideration
Continuing development	Refresher training required 6 months before expiry; content and hours not publicly available	Monthly online sessions	Not documented

Continuation Table:

Attribute	MFDS-certified workforce	Pharmacist medication-safety instructors	Treatment-setting workforce
Substance-use content	Core	Part of medication safety; prescription controlled drugs and youth overdose prioritised (Seoul, 2026)	Core (treatment)
Latest reported scale	2024: 77 instructors and 11 counsellors newly certified, 352 converted; 150 places in 2026	2025: 1,827 sessions, 52,183 participants; 199 instructors in Seoul alone (2026)	80 trainees planned for 2026
Recognition of other streams	No cross-stream training recognition identified; conversion restricted to previously appointed KAADA instructors	None documented	None documented

Sources: MFDS (2025, 2026a, 2026b); KAADA (2024); KPA (2024, 2025); KPA Medication Safety Movement Headquarters (2026); Medipana News (2026); MOHW (2025); Newspim (2026). Further prevention-education workforces funded by the Ministries of Education, Justice and National Defense are not shown. KAADA = Korean Association Against Drug Abuse; KIDS = Korea Institute of Drug Safety and Risk Management; KPA = Korean Pharmaceutical Association; MFDS = Ministry of Food and Drug Safety; MOHW = Ministry of Health and Welfare.

4. Discussion

4.1. Principal findings

Within two years, Korea established a legal basis, a delegated operating structure, a standardised nested curriculum, practical examinations, demand-based regional allocation and a time-limited credential. The comparative review identifies several strengths in this design: a formal renewal point, direct assessment of practical performance and publicly reported certification-stage counts. Viewed through the HR lifecycle, however, the scheme remains concentrated on entry and initial development. Its main instruments specify and assess initial competence, while regional allocation and a five-year renewal cycle provide a limited structure for subsequent deployment and maintenance. Remuneration standards, post-certification feedback and performance management were not documented in the reviewed sources, nor were mechanisms for recognising learning across parallel programmes or progressing to higher credential levels. Governance transparency is also limited: certification is specified in a discretionary provision of the Enforcement Decree, while detailed refresher-training requirements, a code of conduct and disciplinary procedures are not publicly available. In AMO terms, Korea has established a credential and some supporting HR arrangements, but not yet a comprehensive workforce system around it.

4.2. Interpreting the gaps

This imbalance matters because the available evidence does not support treating certification alone as a guarantee of service quality. Certification has been associated with lower occupational turnover intention (Rothrauff et al., 2011), while evidence linking formal qualifications to treatment outcomes remains limited (van de Ven et al., 2020). These findings support examining retention and continued development alongside entry requirements. Three features of the Korean design warrant attention.

First, the reported counts fall sharply between training completion and examination passage. Without the number of candidates who actually sat the examination, however, non-participation cannot be distinguished from examination failure. No published job analysis underpinning the Korean examinations was identified, limiting external assessment of their alignment with occupational requirements. The IC&RC approach provides a comparator through its published job analysis and examination domains (IC&RC, 2024). Second, the practicum is brief. Supervision before certification was confined to the practicum (for example, three supervision sessions within the 2024–2025 counsellor practicum; KAADA, 2024), and no structured post-certification coaching or supervision was documented. Evidence from clinical training, particularly motivational interviewing, suggests that skills may decline without continued feedback and coaching, although the extent to which these findings transfer to Korean prevention instructors requires evaluation (Miller et al., 2004; Schwalbe et al., 2014; Walters et al., 2005). Third, access to transitional recognition differs across workforce streams. Previously appointed KAADA instructors could obtain certification through a conversion route requiring training and an examination, whereas no equivalent route was identified for instructors trained in parallel programmes. Perceived procedural and distributive justice have been associated with voluntary turnover and occupational turnover intention (Eby and Rothrauff-Laschober, 2012; Rothrauff et al., 2011). Differences in access to transitional recognition could therefore affect experienced practitioners' willingness to remain. However, the 2026 report of pharmacist instructor departures does not establish their scale or causes; this proposed mechanism requires direct investigation (Kim, 2026).

The fragmentation of prevention and rehabilitation workforce streams also has an organisational dimension. The MFDS funds two instructor streams with different entry standards, training content and credentialing arrangements, while a third stream is emerging in treatment settings under the MOHW. These arrangements raise questions about how to combine broad access with professional standards. Related debates have occurred in Australia, where the cited studies describe minimum-qualification policies in two jurisdictions (Pidd et al., 2012; Skinner et al., 2021), and in Canada, where addiction counsellors remain largely unregulated, with provincial variation (Slipp et al., 2025). The Korean Enforcement Decree already provides for a council of relevant agencies to coordinate the programme (Republic of Korea, 2026b, Article 20-2(xii)). The reviewed sources did not document whether this council has been used to coordinate entry standards, training recognition or deployment across workforce streams.

The measurement deficit is not unique to Korea. International evidence linking formal qualifications to client outcomes remains limited, and reporting of training interventions is inconsistent even in randomised trials (Madson et al., 2019; van de Ven et al., 2020). The Korean sources reviewed here report activity and certification outputs, including 2.29 million people reached by prevention education in 2025 (Kim, 2026) and the numbers obtaining certification. These aggregate outputs do not establish the contribution of certified personnel or demonstrate programme effectiveness. Measures of delivery fidelity and participant outcomes, which the prevention literature identifies as important for evaluating implementation and effectiveness, were not identified in the reviewed programme reports (Durlak and DuPre, 2008; Dusenbury et al., 2003). Because the scheme is still at an early stage, Korea has an opportunity to embed evaluation in its further development, drawing on logic models for training and technical assistance (Scott et al., 2024) and, where

feasible, randomised evaluations of post-certification support. The cluster-randomised evaluation of implementation facilitation added to technology transfer provides one relevant design example (Garner et al., 2020).

4.3. Development priorities

Table 5 presents proposed development priorities by implementation horizon and potential policy instrument. Short-term priorities focus on operational transparency and support for practice. Medium-term priorities address recognition, renewal, career progression and coordination across workforce streams. Longer-term priorities concern the statutory basis and sustained workforce monitoring and evaluation. The policy instrument required for each measure should be determined through a review of existing legal authority and implementation responsibilities. Each priority is mapped to the HR function or governance function it is intended to strengthen and to supporting evidence or comparator practice.

Table 5. Proposed development priorities for the Korean certification scheme by implementation horizon.

Implementation horizon	Priority	Primary AMO or governance function	Supporting evidence or comparator practice
Short term	Publish the operating guidelines, including the code of conduct, renewal requirements and grounds for revocation	Governance	IC&RC (2024); NAADAC and NCC AP (2021)
	Pilot structured post-certification coaching with observation-based feedback; determine frequency and duration through evaluation	Ability	Miller et al. (2004); Schwalbe et al. (2014)
	Observational fidelity checklist for teaching sessions, used for feedback and monitoring	Ability; motivation	Dusenbury et al. (2003); Durlak and DuPre (2008)
	Publish annual pipeline, deployment and retention statistics	Governance	NHS England (2024a); Skinner et al. (2020)
	Develop or document the job analysis and publish the examination blueprint	Ability	IC&RC (2024)
	Assess prior learning through portfolios and practical assessment against common competency standards; provide targeted training for identified gaps	Opportunity	Proposed design; indirect rationale from Rothrauff et al. (2011); ISSUP (n.d.)
Medium term	Structured renewal: CPD hours, supervised practice and teaching activity	Ability	ISSUP (n.d.); CACCF (n.d.-a)
	Tiered credential with a senior/ supervisor level	Opportunity; motivation	NCC AP (n.d.); Knudsen et al. (2008, 2013)
	Develop and pilot remuneration standards and workload norms for deployed staff	Motivation	Knudsen et al. (2003); Eby and Rothrauff-Laschober (2012)
	Interprofessional competency framework with role-specific modules	Ability; opportunity	CCSA (2023); NHS England (2024b)
	Cross-stream coordination through the Decree's inter-agency council	Governance	Republic of Korea (2026b)

Continuation Table:

Implementation horizon	Priority	Primary AMO or governance function	Supporting evidence or comparator practice
	Specify core requirements, validity and grounds for revocation in the Act or Enforcement Decree, following legislative review	Governance	Yang (2022)
Long term	Workforce module in the statutory triennial survey	Governance	Republic of Korea (2026a)
	Evaluate certification and post-certification support in relation to delivery quality and observed workforce retention	Governance	Garner et al. (2020); Scott et al. (2024)

Implementation horizons are proposed rather than legally prescribed. Potential instruments include operating guidelines, MFDS Notices, the Enforcement Decree and the Act; the appropriate instrument requires review for each measure. Citations provide empirical evidence, comparator practice or an indirect rationale and do not necessarily establish the effectiveness of the proposed reform. AMO = ability–motivation–opportunity (Jiang et al., 2012); CPD = continuing professional development. Other abbreviations as in **Tables 1** and **2**.

Three priorities deserve emphasis. The first is post-certification development. Structured coaching during the first months of practice, incorporating observation-based feedback, is supported by evidence on skill maintenance from clinical training studies, particularly motivational interviewing (Miller et al., 2004; Schwalbe et al., 2014). Supervised train-the-trainer models offer a potential delivery approach, although their costs and feasibility in the Korean prevention setting require evaluation (Martino et al., 2011). A fidelity checklist aligned with the teaching competencies, piloted and used by trained observers, could support developmental feedback and routine monitoring of delivery (Dusenbury et al., 2003). The second priority is recognition of prior learning. A portfolio-based pathway could assess prior training and teaching experience against common competency standards, alongside the practical examination. Experienced instructors from parallel streams could then complete targeted training to address identified gaps rather than automatically repeat the full curriculum. The third priority is a tiered credential that includes a supervisor level. Such a structure could provide a career pathway and support the development of a supervisor workforce, with differentiated remuneration linked to defined responsibilities. Separate supervisor credentials in the United States and Canada provide comparator models (CACCF, n.d.-a; NCC AP, n.d.). Evidence linking clinical supervision to lower emotional exhaustion and turnover intention provides a rationale for evaluating this approach, rather than proof that a supervisor credential itself improves retention (Knudsen et al., 2008, 2013).

An interprofessional competency framework with shared core competencies and role-specific modules could support coordination across the parallel streams. Canada's proficiency-based competencies and England's role-based capability framework provide relevant comparators (Canadian Centre on Substance Use and Addiction [CCSA], 2023; NHS England, 2024b). The framework could recognise pharmacists' relevant expertise in medication safety, including the prescription controlled-drug and overdose topics prioritised in the Seoul programme (Medipana News, 2026). It should also specify and assess the specialised counselling competencies required

for rehabilitation roles, rather than assume that any professional qualification alone establishes those competencies. In the longer term, core credential requirements, validity and grounds for revocation should be set out in the Act or Enforcement Decree, with the appropriate legal level determined through legislative review. The explicit provisions governing honorary drug-control monitors offer a domestic comparison in the degree of formal specification, although the roles and legal arrangements differ. Earlier proposals for a statutory qualification provide relevant legislative context (Yang, 2022). A workforce module in the statutory triennial survey could complement these reforms by collecting data on qualifications, deployment, workload, supervision and intentions to remain in the field.

4.4. Implications for human resource management

The Korean case illustrates a general risk for public-service workforces that are professionalised through credentials. Credentialing may be attractive to regulators because it is visible, relatively quick to establish and easy to count. Yet a credential that is not embedded in HR practices that motivate and retain the people who hold it could fail to retain the workforce it was designed to strengthen. For HR research, the case suggests that the credential–outcome question should be reframed. The relevant question is not whether certified practitioners outperform uncertified ones, which the available evidence has not resolved. A more tractable question is which bundle of practices surrounding a credential sustains competence and retention. The fairness of transition arrangements, and particularly the recognition of prior learning, deserves attention as a possible determinant of whether professionalisation retains or displaces experienced workers.

4.5. Limitations

The review has several limitations. The Korean policy analysis relies largely on publicly available legal and administrative documents, supplemented by policy forum proceedings that are not publicly available (KAADA, 2024) and by professional press reports. These sources describe formal arrangements and reported experiences but do not independently establish implementation or effectiveness. Certification-stage data were identified only for the 2024 intake, in a single source that is not publicly available, and reflect progress at the reporting point rather than final cohort outcomes. They do not distinguish examination non-participation from failure or delayed progression. No comparable data for later cohorts, or systematic data on certified practitioners' remuneration and actual service activity, were identified in the sources reviewed by September 2026. The evidence synthesis used targeted rather than systematic searches and may have omitted relevant studies. Most outcome studies concern treatment counsellors in the United States, limiting transferability to Korean prevention instructors. Reports of pharmacist instructor departures derive from forum statements rather than systematic counts and do not establish their scale or causes. The comparators were selected for variation rather than representativeness, exclude continental European systems, and differ in occupational scope and level of regulation; their requirements are therefore not directly equivalent. Finally, the author's roles in organisations examined in this review are disclosed in the conflict-of-interest statement and may influence interpretation. Apart from the KAADA (2024) proceedings and the KIDS summary used only for verification, the analysis relied on publicly available documents, and no confidential committee deliberations or examination materials were used.

5. Conclusion

South Korea has rapidly established a certification scheme for its drug prevention and rehabilitation workforce, but its early design remains concentrated on entry and initial development. The next phase should strengthen transparent operating rules, post-certification coaching and fidelity monitoring, structured renewal, recognition of prior learning across parallel streams, career progression with a supervisor tier, and routine workforce monitoring. International evidence supports the importance of continued learning and organisational support, while leaving uncertainty about the independent effects of credentials on retention and service outcomes. Implementing and evaluating these priorities would help Korea develop its certification scheme into a more comprehensive workforce system.

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References

1. Addiction Professionals. (n.d.). Drug and Alcohol Professional Certificate. Available online: https://addictionprofessionals.org.uk/accreditation/addiction-professionals-drug-and-alcohol-professional-certificate (accessed on 21 September 2026).
2. Black C. (2021). Review of drugs part two: Prevention, treatment, and recovery. Independent report for the Home Office and the Department of Health and Social Care. Available online: https://www.gov.uk/government/publications/review-of-drugs-phase-two-report (accessed on 21 September 2026).
3. Canadian Addiction Counsellors Certification Federation [CACCF]. (n.d.-a). Canadian Clinical Supervisor–Addiction Counsellor (CCS-AC). Available online: https://caccf.ca/ccs-ac/ (accessed on 21 September 2026).
4. Canadian Addiction Counsellors Certification Federation [CACCF]. (n.d.-b). Submit a professional conduct review. Available online: https://caccf.ca/professional-conduct-review-reporting (accessed on 21 September 2026).
5. Canadian Addiction Counsellors Certification Federation [CACCF]. (2022). Canon of ethical principles. Available online: https://caccf.ca/wp-content/uploads/2025/10/Canon-of-Ethical-Principles-2022.pdf (accessed on 21 September 2026).
6. Canadian Centre on Substance Use and Addiction [CCSA]. (2023). Technical competencies for Canada's substance use and mental health workforce, version 4. CCSA. Available online: https://www.ccsa.ca/technical-competencies-canadas-substance-

use-and-mental-health-workforce (accessed on 21 September 2026).
7. Choi SJ. (2026). The drug rehabilitation field has widened: People are needed to safeguard recovery. Hit News, 14 September 2026 (in Korean). Available online: https://www.hitnews.co.kr/news/articleView.html?idxno=79079 (accessed on 21 September 2026).
8. Durlak JA, DuPre EP. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. American Journal of Community Psychology. 41(3–4): 327–350. https://doi.org/10.1007/s10464-008-9165-0
9. Dusenbury L, Brannigan R, Falco M, et al. (2003). A review of research on fidelity of implementation: Implications for drug abuse prevention in school settings. Health Education Research. 18(2): 237–256. https://doi.org/10.1093/her/18.2.237
10. Eby LT, Burk H, Maher CP. (2010). How serious of a problem is staff turnover in substance abuse treatment? A longitudinal study of actual turnover. Journal of Substance Abuse Treatment. 39(3): 264–271. https://doi.org/10.1016/j.jsat.2010.06.009
11. Eby LT, Rothrauff-Laschober TC. (2012). The relationship between perceptions of organizational functioning and voluntary counselor turnover: A four-wave longitudinal study. Journal of Substance Abuse Treatment. 42(2): 151–158. https://doi.org/10.1016/j.jsat.2011.10.008
12. Felipe MV, Melgar MI, Johnson K. (2022). Adaptation of the Universal Treatment Curriculum to Philippine context and online environment. Adiktologie. 22(1): 21–26. https://doi.org/10.35198/01-2022-001-0003
13. Garman AN, McAlearney AS, Harrison MI, et al. (2011). High-performance work systems in health care management, part 1: Development of an evidence-informed model. Health Care Management Review. 36(3): 201–213. https://doi.org/10.1097/HMR.0b013e318201d1bf
14. Garner BR, Godley SH, Dennis ML, et al. (2012). Using pay for performance to improve treatment implementation for adolescent substance use disorders: Results from a cluster randomized trial. Archives of Pediatrics & Adolescent Medicine. 166(10): 938–944. https://doi.org/10.1001/archpediatrics.2012.802
15. Garner BR, Gotham HJ, Chaple M, et al. (2020). The implementation and sustainment facilitation strategy improved implementation effectiveness and intervention effectiveness: Results from a cluster-randomized, type 2 hybrid trial. Implementation Research and Practice. 1: 2633489520948073. https://doi.org/10.1177/2633489520948073
16. Hoge MA, Stuart GW, Morris J, et al. (2013). Mental health and addiction workforce development: Federal leadership is needed to address the growing crisis. Health Affairs. 32(11): 2005–2012. https://doi.org/10.1377/hlthaff.2013.0541
17. International Certification & Reciprocity Consortium [IC&RC]. (n.d.). IC&RC credentials and reciprocity. Available online: https://internationalcredentialing.org/icrc-credentials/ (accessed on 21 September 2026).
18. International Certification & Reciprocity Consortium [IC&RC]. (2024). Candidate guide for the IC&RC Prevention Specialist examination. Available online: https://internationalcredentialing.org/wp-content/uploads/2024/08/Prevention_Candidate_Guide_Final_06.28.24.pdf (accessed on 21 September 2026).
19. International Consortium of Universities for Drug Demand Reduction [ICUDDR]. (n.d.). Our credentials and certifications. Available online: https://icuddr.org/credentialing-and-certification/our-credentials-and-certifications/ (accessed on 21 September 2026).
20. International Society of Substance Use Professionals [ISSUP]. (n.d.). ICAP certification. Available online: https://www.issup.net/training/resources/icap-certification (accessed on 21 September 2026).
21. Jiang K, Lepak DP, Hu J, et al. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. Academy of Management Journal. 55(6): 1264–1294. https://doi.org/10.5465/amj.2011.0088
22. Kang JH, Maeng SJ, Kim YH. (2019). A study on the deactivating factors of system for compulsory treatment and rehabilitation of drug abusers in Korea. Studies on Life and Culture. 52: 129–152 (in Korean). https://doi.org/10.17924/solc.2019.52.129
23. Kim HJ. (2026). Drug prevention education reached 2.29 million people, but the field signals workforce attrition. Yakup Gongron (Korean Pharmaceutical Association News), 24 April 2026 (in Korean). Available online: https://www.kpanews.co.kr/news/articleView.html?idxno=533669 (accessed on 21 September 2026).
24. Klingemann J, Mokros Ł, Sienkiewicz-Jarosz H, et al. (2024). The prevalence of occupational burnout and its individual and situational predictors among addiction therapists. Alcohol and Alcoholism. 59(1): agad074. https://doi.org/10.1093/alcalc/agad074

25. Knight DK, Becan JE, Flynn PM. (2012). Organizational consequences of staff turnover in outpatient substance abuse treatment programs. Journal of Substance Abuse Treatment. 42(2): 143–150. https://doi.org/10.1016/j.jsat.2011.10.009
26. Knudsen HK, Ducharme LJ, Roman PM. (2008). Clinical supervision, emotional exhaustion, and turnover intention: A study of substance abuse treatment counselors in the Clinical Trials Network of the National Institute on Drug Abuse. Journal of Substance Abuse Treatment. 35(4): 387–395. https://doi.org/10.1016/j.jsat.2008.02.003
27. Knudsen HK, Johnson JA, Roman PM. (2003). Retaining counseling staff at substance abuse treatment centers: Effects of management practices. Journal of Substance Abuse Treatment. 24(2): 129–135. https://doi.org/10.1016/s0740-5472(02)00357-4
28. Knudsen HK, Roman PM, Abraham AJ. (2013). Quality of clinical supervision and counselor emotional exhaustion: The potential mediating roles of organizational and occupational commitment. Journal of Substance Abuse Treatment. 44(5): 528–533. https://doi.org/10.1016/j.jsat.2012.12.003
29. Ko YS. (2023). Suggestions to improve treatment and rehabilitation systems for drug abusers in Korea. Journal of Correctional Welfare. 84: 1–27 (in Korean). https://doi.org/10.35422/cwsk.2023.84.1
30. Korean Association Against Drug Abuse [KAADA]. (2024). The roles and social responsibilities of drug prevention and rehabilitation professionals. In: Proceedings of the Ceremony and Policy Forum for the Drug Prevention and Rehabilitation Certification Scheme, held on 19 December 2024, Seoul. KAADA, pp. 9–30 (in Korean); the certification figures cited here appear on p. 21. The proceedings were distributed to participants and are not publicly available. The event is publicly documented in the MFDS press release of 19 December 2024. Available online: https://www.mfds.go.kr/brd/m_99/view.do?seq=48760 (accessed on 1 October 2026).
31. Korean Pharmaceutical Association [KPA]. (2024). KPA signs agreement with the Ministry of Food and Drug Safety for the 2024 “Know Your Medicines Right” support programme. KPA notice, 11 April 2024 (in Korean). Available online: https://kpanet.or.kr/board.cm?boardSeq=154867&menuCd=1002020000&tabYn=N (accessed on 1 October 2026).
32. Korean Pharmaceutical Association [KPA]. (2025). Creating a medication-use environment the public can trust. KPA notice, 18 April 2025 (in Korean). Available online: https://kpanet.or.kr/board.cm?boardSeq=197761&menuCd=1002020000&tabYn=N (accessed on 1 October 2026).
33. KPA Medication Safety Movement Headquarters. (2026). History, organisation and provincial chapters (in Korean). Available online: https://yakbaro.kpanet.or.kr/history (accessed on 21 September 2026).
34. Lee BH. (2025). Strategies for strengthening prevention education and public relations in response to drug crime. Korean Police Studies Review. 27(1): 381–414 (in Korean).
35. Madson MB, Villarosa-Hurlocker MC, Schumacher JA, et al. (2019). Motivational interviewing training of substance use treatment professionals: A systematic review. Substance Abuse. 40(1): 43–51. https://doi.org/10.1080/08897077.2018.1475319
36. Martino S, Ball SA, Nich C, et al. (2011). Teaching community program clinicians motivational interviewing using expert and train-the-trainer strategies. Addiction. 106(2): 428–441. https://doi.org/10.1111/j.1360-0443.2010.03135.x
37. McLellan AT, Woody GE, Luborsky L, et al. (1988). Is the counselor an “active ingredient” in substance abuse rehabilitation? An examination of treatment success among four counselors. Journal of Nervous and Mental Disease. 176(7): 423–430. https://doi.org/10.1097/00005053-198807000-00004
38. Medipana News. (2026). Seoul Pharmaceutical Association launches its 2026 medication safety education programme. Medipana News, 18 April 2026 (in Korean). Available online: https://www.medipana.com/news/articleView.html?idxno=409965 (accessed on 21 September 2026).
39. Miller WR, Mount KA. (2001). A small study of training in motivational interviewing: Does one workshop change clinician and client behavior? Behavioural and Cognitive Psychotherapy. 29(4): 457–471. https://doi.org/10.1017/S1352465801004064
40. Miller WR, Yahne CE, Moyers TB, et al. (2004). A randomized trial of methods to help clinicians learn motivational interviewing. Journal of Consulting and Clinical Psychology. 72(6): 1050–1062. https://doi.org/10.1037/0022-006X.72.6.1050
41. Ministry of Food and Drug Safety [MFDS]. (2024). Notice on the delegation of drug misuse prevention and social rehabilitation programmes (MFDS Notice No. 2024-14, 15 March 2024) (in Korean). Available online: https://www.mfds.go.kr/brd/m_211/view.do?seq=14821 (accessed on 21 September 2026).
42. Ministry of Food and Drug Safety [MFDS]. (2025). Detailed schedule and eligibility for the 2025 drug prevention and rehabilitation professional certification scheme. Programme announcement, 7 February 2025 (in Korean). Available online:

https://nodrugzone.mfds.go.kr/home/kor/M782609475/board.do?act=detail&idx=cb00d1a0008a85e71a41b8741facbffe17c737b812124403359eb80b6737a80c (accessed on 1 October 2026).

43. Ministry of Food and Drug Safety [MFDS]. (2026a). MFDS to train drug prevention and rehabilitation professionals in a regionally balanced way. Press release, 13 May 2026 (in Korean). Available online: https://www.mfds.go.kr/brd/m_99/view.do?seq=49978 (accessed on 1 October 2026).
44. Ministry of Food and Drug Safety [MFDS]. (2026b). Detailed schedule and training guide for the 2026 drug prevention and rehabilitation professional certification scheme. Programme announcement, 27 April 2026 (in Korean). Available online: https://nodrugzone.mfds.go.kr/home/kor/M782609475/board.do?act=detail&idx=cb00d1a0008a85e71a41b8741facbffeaa76698c80e4a140a8b746797566a68a (accessed on 1 October 2026).
45. Ministry of Food and Drug Safety [MFDS]. (2026c). Frequently asked questions: Drug prevention and rehabilitation professional certification scheme (in Korean). Available online: https://nodrugzone.mfds.go.kr/home/kor/M603647873/board.do (accessed on 1 October 2026).
46. Ministry of Health and Welfare [MOHW]. (2025). Strengthening the expertise of treatment-and-protection institutions for people with drug addiction. Policy briefing, 8 May 2025 (in Korean). Available online: https://www.korea.kr/news/policyNewsView.do?newsId=148942942 (accessed on 21 September 2026).
47. Ministry of Health, Labour and Welfare [MHLW]. (2017). Development of specialist medical institutions and treatment hub institutions for addiction (Notice Shōhatsu 0613 No. 4; partially revised 2022) (in Japanese). Available online: https://www.pref.iwate.jp/_res/projects/default_project/_page_/001/060/806/sennteikijunn.pdf (accessed on 21 September 2026).
48. Moyers TB, Miller WR. (2013). Is low therapist empathy toxic? Psychology of Addictive Behaviors. 27(3): 878–884. https://doi.org/10.1037/a0030274
49. NAADAC, NCC AP. (2021). NAADAC/NCC AP code of ethics. Available online: https://www.naadac.org/assets/2416/naadac_code_of_ethics_112021.pdf (accessed on 21 September 2026).
50. Najavits LM, Weiss RD. (1994). Variations in therapist effectiveness in the treatment of patients with substance use disorders: An empirical review. Addiction. 89(6): 679–688. https://doi.org/10.1111/j.1360-0443.1994.tb00954.x
51. Narcotics Division. (2024). Three-year plan on drug treatment and rehabilitation services in Hong Kong (2024–2026). Security Bureau, Government of the Hong Kong Special Administrative Region. Available online: https://www.nd.gov.hk/pdf/three_year_plan_2024_2026_final_en.pdf (accessed on 21 September 2026).
52. National Center of Neurology and Psychiatry [NCNP]. (2024a). The 16th training course on group therapy for drug dependence using cognitive-behavioural techniques (in Japanese). Available online: https://www.ncnp.go.jp/common/cms/docs/9f195dee54b1a3550a8d911fa2d4cfe0e1a7a9e4.pdf (accessed on 21 September 2026).
53. National Center of Neurology and Psychiatry [NCNP]. (2024b). Countering drug dependence through treatment: The spread of SMARPP in Japan and overseas (in Japanese). Available online: https://www.ncnp.go.jp/activities/detail.php?@uid=IBX53xQDsTxGNmYJ (accessed on 21 September 2026).
54. National Certification Commission for Addiction Professionals [NCC AP]. (n.d.). NCC AP credentials. Available online: https://www.naadac.org/certification (accessed on 21 September 2026).
55. Newspim. (2026). Ministry of Health and Welfare to train 80 drug addiction treatment and rehabilitation professionals. Newspim, 29 May 2026 (in Korean). Available online: https://www.newspim.com/news/view/20260529000269 (accessed on 21 September 2026).
56. NHS England. (2024a). 10-year strategic plan for the drug and alcohol treatment and recovery workforce (2024–2034). Available online: https://www.england.nhs.uk/publication/10-year-strategic-plan-for-the-drug-and-alcohol-treatment-and-recovery-workforce/ (accessed on 21 September 2026).
57. NHS England. (2024b). Capability framework for the drug and alcohol treatment and recovery workforce. Available online: https://www.england.nhs.uk/long-read/capability-framework-for-the-drug-and-alcohol-treatment-and-recovery-workforce/ (accessed on 21 September 2026).
58. Office for Health Improvement and Disparities [OHID]. (2022). Commissioning quality standard: Alcohol and drug treatment and recovery guidance. Available online: https://www.gov.uk/government/publications/commissioning-quality-standard-alcohol-and-drug-services (accessed on 21 September 2026).
59. Paschall MJ, Salazar Silva F, Sloboda Z, et al. (2022). Effects of the Universal Prevention Curriculum for Schools on substance use among Peruvian adolescents: A randomized trial. Journal of Drug Education. 51(3–4): 82–100. https://doi.

org/10.1177/00472379231185130

60. Pidd K, Roche A, Duraisingam V, et al. (2012). Minimum qualifications in the alcohol and other drugs field: Employers' views. Drug and Alcohol Review. 31(4): 514–522. https://doi.org/10.1111/j.1465-3362.2011.00392.x
61. Republic of Korea. (2024). Narcotics Control Act (Act No. 19648, promulgated 16 August 2023, effective 17 February 2024; historical version) (in Korean). Available online: https://www.law.go.kr/ 법령 / 마약류관리에관한법률 / (20240217,19648,20230816)(accessed on 8 October 2026).
62. Republic of Korea. (2026a). Narcotics Control Act (Act No. 21691, promulgated 26 May 2026; version effective 27 August 2026) (in Korean). Available online: https://www.law.go.kr/ 법령 / 마약류관리에관한법률 /(20260827,21691,20260526) (accessed on 8 October 2026).
63. Republic of Korea. (2026b). Enforcement Decree of the Narcotics Control Act (Presidential Decree No. 36055, promulgated 27 January 2026, effective 1 February 2026) (in Korean). Available online: https://www.law.go.kr/ 법령 / 마약류관리에관한법률시행령 /(20260201,36055,20260127) (accessed on 8 October 2026).
64. Ringwalt CL, Pankratz MM, Jackson-Newsom J, et al. (2010). Three-year trajectory of teachers' fidelity to a drug prevention curriculum. Prevention Science. 11(1): 67–76. https://doi.org/10.1007/s11121-009-0150-0
65. Roche A, Nicholas R. (2017). Workforce development: An important paradigm shift for the alcohol and other drugs sector. Drugs: Education, Prevention and Policy. 24(6): 443–454. https://doi.org/10.1080/09687637.2016.1262823
66. Rothrauff TC, Abraham AJ, Bride BE, et al. (2011). Occupational turnover intentions among substance abuse counselors. Journal of Substance Abuse Treatment. 40(1): 67–76. https://doi.org/10.1016/j.jsat.2010.08.008
67. Schwalbe CS, Oh HY, Zweben A. (2014). Sustaining motivational interviewing: A meta-analysis of training studies. Addiction. 109(8): 1287–1294. https://doi.org/10.1111/add.12558
68. Scott VC, Chagnon E, Wandersman A. (2024). The Technical Assistance (TA) Effectiveness Logic Model: A tool for systematically planning, delivering, and evaluating TA. Evaluation & the Health Professions. 47(4): 369–385. https://doi.org/10.1177/01632787241285561
69. Sholomskas DE, Syracuse-Siewert G, Rounsaville BJ, et al. (2005). We don't train in vain: A dissemination trial of three strategies of training clinicians in cognitive-behavioral therapy. Journal of Consulting and Clinical Psychology. 73(1): 106–115. https://doi.org/10.1037/0022-006X.73.1.106
70. Skinner N, Kostadinov V, Duraisingam V, et al. (2021). Review and revision of the National Alcohol and Other Drug Workforce Development Strategy: Discussion paper. National Centre for Education and Training on Addiction, Flinders University. Available online: https://nceta.flinders.edu.au/application/files/7016/3969/7235/AOD_WFD_Strategy_Discussion_Paper_-_FINAL_.pdf (accessed on 21 September 2026).
71. Skinner N, McEntee A, Roche A. (2020). Australia's alcohol and other drug workforce: National survey results 2019–2020. National Centre for Education and Training on Addiction, Flinders University. Available online: https://nceta.flinders.edu.au/workforce/national-aod-workforce-survey (accessed on 21 September 2026).
72. Skinner N, Roche AM. (2021). 'Very demanding. Extremely rewarding': Exploring the co-occurrence of burnout and engagement in alcohol and other drug workers. Drug and Alcohol Review. 40(6): 989–997. https://doi.org/10.1111/dar.13250
73. Slipp M, Myles S, Atanackovic J, et al. (2025). Re-imagining approaches for mental health and substance use health workforce regulation in Canada: Making room for dynamic tensions. PLOS Mental Health. 2(3): e0000168. https://doi.org/10.1371/journal.pmen.0000168
74. Squires DD, Gumbley SJ, Storti SA. (2008). Training substance abuse treatment organizations to adopt evidence-based practices: The Addiction Technology Transfer Center of New England Science to Service Laboratory. Journal of Substance Abuse Treatment. 34(3): 293–301. https://doi.org/10.1016/j.jsat.2007.04.010
75. van de Ven K, Ritter A, Roche A. (2020). Alcohol and other drug (AOD) staffing and their workplace: Examining the relationship between clinician and organisational workforce characteristics and treatment outcomes in the AOD field. Drugs: Education, Prevention and Policy. 27(1): 1–14. https://doi.org/10.1080/09687637.2019.1622649
76. Victorian Department of Health. (2006). Alcohol and other drug workforce minimum qualification strategy. Available online: https://www.health.vic.gov.au/alcohol-and-other-drug-workforce/alcohol-and-other-drug-workforce-minimum-qualification-strategy (accessed on 21 September 2026).
77. Walters ST, Matson SA, Baer JS, et al. (2005). Effectiveness of workshop training for psychosocial addiction treatments: A systematic review. Journal of Substance Abuse Treatment. 29(4): 283–293. https://doi.org/10.1016/j.jsat.2005.08.006

78. West MA, Borrill C, Dawson J, et al. (2002). The link between the management of employees and patient mortality in acute hospitals. International Journal of Human Resource Management. 13(8): 1299–1310. https://doi.org/10.1080/09585190210156521
79. Yang HJ. (2022). A study on the necessity of legislation for the prevention and treatment of drug addiction. Korean Police Studies Review. 24(6): 223–246 (in Korean).
80. Zerden LS, Gaiser M, Daberko L, et al. (2025). State-by-state variation in the credentialing, training, supervision, and Medicaid reimbursement of the high-school, associates, and bachelor's-level addiction counselor workforce. Substance Use & Addiction Journal. 46(4): 859–870. https://doi.org/10.1177/29767342251330418