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Exploring factors affecting knowledge creation in under-researched healthcare topics: a case study of women's health research

Ji Eun Park¹, Seung-Ah Choe², Saerom Kim³ and Hye Sook Min^{4*}

Abstract

Background Knowledge creation (KC) produces resources to synthesize policy evidence and contributes to breakthroughs in unresolved health problems by discovering the previously unknown. Nevertheless, few studies have attempted to analyze which factors contribute to KC. This study aims to investigate the factors hindering the active occurrence of KC by using women's health research as a representative example of an under-researched healthcare field in South Korea.

Methods The study adopted a qualitative approach to exploring factors influencing KC from researchers' perspectives. We conducted semi-structured interviews with 14 experts who have experience in planning women's health research, research policymaking or conducting research in South Korea. Data were analyzed using a qualitative thematic analysis according to Castleberry and Nolen.

Results Factors affecting KC across all three government-funded research processes were identified. Most of the identified factors were found to be barriers to KC, rather than enablers. The key influencing factors included a focus on urgent, politicized societal issues rather than ongoing health concerns, insufficient motivation and support for researchers, weak communication within interdisciplinary research teams, and challenges with expanding research networks.

Conclusion To bridge the know-do gap in the health policy-making process, it is essential to produce sufficient high-quality knowledge that can serve as policy evidence. The findings of this study illuminate the conditions faced by under-researched topics and identify the factors necessary to enhance KC. We believe our findings will help reshape and invigorate discourse and research policies on KC in healthcare.

Keywords Knowledge creation, Knowledge translation, Research fund, Under-researched, Research policy, Women's health

*Correspondence:

Hye Sook Min

hsmin2017@gmail.com

Full list of author information is available at the end of the article



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Background

Knowledge translation (KT) is a core model for evidence-informed policymaking (EIPM). It is defined as a dynamic and iterative process through which knowledge is synthesized, disseminated, exchanged and applied with the aim of improving health, delivering effective healthcare services and strengthening health systems [1–3]. For KT to be effective, it must be underpinned by the creation of knowledge that is both relevant and applicable to policy. Thus, knowledge creation (KC) is often integrated as a core component within KT frameworks [2–4].

In the healthcare sector, where multiple layers of determinants interact in complex ways, a strong foundation of KC across various fields is essential for designing and implementing population-level interventions. Close attention is needed to the detailed processes of KC in areas where research gaps exist, defined as those areas in which the available evidence is insufficient to support reliable conclusions [5, 6], as well as in under-researched areas where studies remain scarce or marginalized [7–10]. To generate meaningful research questions and explore strategies for promoting KC in these areas, it is necessary to examine the specific processes and influencing factors of KC. In particular, focused analysis of structural issues such as funding mechanisms and research priority-setting in under-researched areas is needed from a KC perspective [11].

From a KC perspective, cardiovascular research has been used as a case in which influencing factors have been identified and strategic efforts proposed to support sustained KC over time. In response to challenges such as insufficient funding, job insecurity and a lack of diversity in senior leadership, researchers in this field have emphasized capacity building, expanded funding and improved equity as key strategies [12]. Creating collaborative research environments and broadening career pathways have also been highlighted as important for retaining researchers [13].

In contrast, under-researched fields lack systematic analysis of the institutional and structural conditions that influence KC. While some studies on marginalized populations and neglected diseases have suggested that limited social awareness, insufficient funding and low provider recognition may hinder KC, such factors tend to be addressed in broad terms, rather than through focused or systematic analysis [9, 14–17]. There remains a need for more explicit and structured examination of how such systematic constraints influence the conditions for KC in under-researched areas.

This study examines the factors influencing KC using women's health research in South Korea as a case study, which is one of the most under-researched areas in the

country. Despite policy efforts to expand the scope of women's health research in South Korea, the proportion of funding allocated to this field increased by only 0.4% between 2012 and 2020. Research remains concentrated in a few priority areas such as breast cancer and reproductive health, while other areas remain under-explored despite their substantial disease burden [18, 19]. This lack of research attention from a public health perspective to women's health has also been documented in Western contexts. An analysis of funding by the United States National Institutes of Health (NIH) found that approximately three-quarters of conditions more prevalent in women received funding at levels below what would be expected based on their disease burden [20]. A recent NIH review of cervical cancer research emphasized ongoing public health needs and the importance of addressing racial and ethnic disparities through more inclusive and systematic approaches [21]. Furthermore, despite increasing concerns about the rise of chronic conditions in women, NIH research investment has not aligned with the actual burden of conditions such as depression, osteoporosis and autoimmune disorders [22].

This study aims to analyze the factors that influence the active process of KC in the field of women's health research in South Korea. As a government-funded research area, women's health provides a useful analytical lens through which broader challenges in KC can be explored. Focusing on the stages through which the South Korean government plans and implements research to address under-researched health issues, the study examines how various factors interact to shape KC. On the basis of the findings, this study seeks to contribute to the development of effective policy strategies to strengthen KC and promote equity in health research.

Methods

Aim

This study aims to identify factors influencing KC in women's health from researchers' perspectives. A qualitative study was conducted using semi-structured interviews to identify factors that influence the stages of KC in women's health. The in-depth interviews were conducted with researchers in women's health as they are the central actors in the KC process. They tend to be sensitive to under-researched areas, and, with their experience, have a solid understanding of institutional, policy and disciplinary contexts.

Selection of the study area

South Korea, with its well-established public research infrastructure, allocates a comparatively high level of public funding to healthcare research [23]. Although

government funding for women's health research more than doubled between 2012 and 2020, its proportional share of the total healthcare research budget increased only modestly, from 2.3% to 2.7% during the same period [18]. Over the past 15 years, policy efforts have been made to expand the scope of women's health research, including the promotion of multidisciplinary approaches. However, these efforts have had limited impact on diversifying the research agenda [24]. Research on women's health continues to concentrate on a few priority areas, such as breast and ovarian cancers and reproductive health, while topics such as chronic diseases among older women, adolescent girls' health and nutrition, and the social determinants of health continue to be insufficiently addressed [18, 19]. This narrowing of research focus may also be shaped by the sociopolitical sensitivity surrounding women's health in South Korea. Recent gender tensions, influenced by the intersection of traditional norms and political discourse, may have contributed to framing certain health topics as controversial or politically sensitive. These include the influence of abortion and reproductive health interventions, gender-based violence, and traditional family norms and gender roles on health outcomes, particularly in terms of how these factors interact with healthcare technologies [25, 26].

Focusing on women's health in South Korea, an area where research policy is institutionally well-structured, yet is marked by significant social fluctuations and an imbalanced distribution of research topics, may offer relevant policy insights for countries with similarly structured research systems that aim to enhance equity and coherence in healthcare research policymaking.

Design

We conducted semi-structured interviews with key informants with experience in planning women's health research at the national level, research policymaking or conducting women's health research. The interview guide was developed based on the framework proposed by Nagesh and Thomas [27] and was finalized after two pre-tests conducted prior to its formal use. It identifies eight key factors influencing the outcomes of government-funded research, which are broadly categorized into individual and institutional dimensions. Although the framework was originally developed from a managerial perspective on government-funded projects, we found it useful as an initial guide for structuring the interviews. Accordingly, we developed an interview guide consisting of two domains: (1) the background or context that led participants to engage in women's health research, and (2) the factors influencing KC in this field (Supplementary Material 1) [27].

Participants

We purposively sampled researcher-practitioners who had more than 5 years of experience in policymaking related to the planning, monitoring or evaluation of women's health research in South Korea, as well as researchers with more than 5 years of substantive experience conducting such research. To avoid potential conflicts of interest, individuals who had participated in research funded by private sources and those with industry affiliations were excluded. The 14 interviewees were divided into three groups on the basis of their role in the KC process. Four participants were government officials with experience in women's health research who have been involved in not only policy planning, monitoring, and evaluating but also conducting women's health research at the central government level. Five participants were researchers from government-funded research institutes with experience planning or conducting women's health research projects at the institutional level. The remaining five participants were women's health research experts from universities and general research institutions, working across various academic disciplines, including public health, sociology, and clinical medicine (Table 1).

Data collection

To identify the expert interviewees, we first searched online resources, created a list of potential participants in an Excel file, and recruited the experts through snowballing. The initial interviewee was a researcher with experience leading multiple government-funded women's health projects, who served as the entry point for snowball sampling. All potential participants were contacted individually via email, provided with a study explanation, and sent a Korean-language semi-structured interview guide. After they agreed to participate in the study, we scheduled interviews between February and August 2023. The first and second authors, together, conducted face-to-face interviews in the participant's office. The interviews were occasionally interrupted by phone calls or visitors, but this had minimal impact on the interview process. We also conducted online interviews if the researcher preferred, as the SARS-CoV-2 epidemic had been spreading during that time. We contacted 18 experts, but only 14 of them agreed to be interviewed owing to time constraints or the risk of being identified. Each interview lasted between 1 and 1.5 h. The authors asked for consent to record the interview and all participants agreed. To enhance interpretive rigor and reflexivity, the authors each independently took notes during the interviews. These notes were shared with all members of the research team immediately after

Table 1 The characteristics of the 14 interviewees

Affiliation	Interviewee	Gender	Academic background	Years of experience
Government department	P1	Female	Medicine (internal medicine)	22
	P2	Female	Nutrition	12
	P3	Male	Chemistry	8
	P4	Male	Science and technology policy	6
Government-funded research institute	R1	Female	Medicine (preventive medicine) / public health	21
	R2	Male	Public health	11
	R3	Female	Public health	19
	R4	Female	Sociology	19
	R5	Female	Medicine (family medicine)	6
University	U1	Female	Medicine (preventive medicine)	21
	U2	Female	Medicine (internal medicine)	12
	U3	Female	Public health administration	18
	U4	Male	Medicine (obstetrics and gynaecology)	20
	U5	Female	Nursing	12

each interview, in order to ensure transparency in the interview content and to facilitate collaborative analysis.

Data coding and analysis

The data were analyzed using qualitative thematic analysis, a widely used method in applied fields such as public health for identifying and interpreting emerging themes [28, 29]. For this study, we followed the five-step process proposed by Castleberry and Nolen [28], which provides a practical framework for enhancing the trustworthiness and rigour of thematic analysis [30, 31]. In the first step, compiling, the first author transcribed all 14 audio recordings verbatim in Korean into a Microsoft Word file and reviewed each transcript multiple times to ensure familiarity. The corresponding author then cross-checked the transcripts for accuracy, completeness and consistency. In the next step, disassembling, the data were broken down into meaningful units and open-coded. Meaning units varied in length, ranging from a single sentence to multiple sentences or a short paragraph, depending on the coherence of meaning within each segment [32]. The coding process was guided by both inductive insights and the structure of the interview guide. To enhance consistency and reflexivity, the research team shared analytic notes and engaged in collaborative discussions to refine the preliminary codes. Any discrepancies in coding were resolved through repeated discussions between the two authors, and once consensus was reached, the first author completed coding of the remaining transcripts. In the reassembling phase, the coded data were categorized into potential themes. During the interpreting step, these themes were iteratively reviewed for alignment with the research

questions and situated within the broader context of research policy. In cases of disagreement, the authors deliberated until consensus was achieved to ensure consistency and validity in the thematic framework. Finally, in the concluding step, the first author drafted an analytical summary describing each thematic category. This was reviewed by the corresponding author to finalize the analysis. The identified themes were categorized according to the stages of government-funded research process including planning, implementation and utilization, and the frequency of sub-themes was counted on the basis of the meaning units mentioned by participants. All data collection and analysis were conducted in Korean.

Trustworthiness and Reflexivity

To enhance the trustworthiness and analytical rigor of this study, we adopted several strategies throughout the research process. Despite the relatively small number of interviews, we sought to capture a broader range of perspectives in this study by including participants with diverse institutional roles. To support interpretive consistency and minimize bias, we engaged in collaborative and iterative discussions throughout the analytic process, including regular cross-checking and peer debriefing [33–35]. These discussions encouraged reflexivity, helping us remain aware of how our own perspectives may have influenced the interpretation of the data. As researchers specializing in health and research policy, rather than in women's health specifically, the interview guide was shaped by our expertise in research policy, particularly concerning under-researched health topics. We acknowledge that

our disciplinary background and positionality may have influenced the framing and interpretation of findings. Additionally, as many participants were affiliated with government agencies or closely connected academic institutions, their perspectives may have leaned toward pragmatic rather than critical or transformative views. Interviews were conducted and analyzed in Korean and translated into English during manuscript preparation. While care was taken to preserve meaning, certain cultural or socio-political nuances may have been unintentionally softened. Despite our efforts at iterative review and validation, we acknowledge that some degree of our own interpretation may have been introduced during the translation and analysis process.

Results

The interviewees described factors influencing KC in women's health, both positively and negatively, according to the chronological progression of government-funded research, which can be broadly divided into three processes: the research planning process, where the research topic and overall government research budget are determined; the research implementation process, where researchers generate knowledge; and the research utilization process, where the created knowledge is adopted and used as policy evidence by decision-makers (Fig. 1). Table 2 presents a summary of the coding results, including themes and sub-themes representing the factors affecting KC.

Notably, all of the experts in women's health research who participated in this study developed their interest in the field through personal experiences of gender

inequality and social discrimination. Their selection and approach to research topics in women's health were grounded in these lived experiences and perspectives. Furthermore, opportunities such as academic conferences, classes, research projects and activities within civil society organizations (CSOs) played a key role in fostering their interest in this field." [As the media covered the issue of gender-based violence] I was able to meet some feminist movements outside of school. Through those movements, I had the opportunity to meet people in different disciplines at other universities". (U1)

Funding allocation: non-systematic and temporary approaches

Most participants reported that government research funding is predominantly allocated on the basis of political agendas, rather than ongoing health issues or disease burden. Research institutions strategically align their project proposals with government priorities to enhance their chances of securing funding. As one participant explained, "We cannot remain unaffected by [government] agendas. First, we review the list of national policy tasks. Whether women's issues are included [in the national priorities list] will determine the chance of a research project being selected" (R2).

The participants perceived that the scope of women's health research topics was insufficiently comprehensive. Participants noted that government research funds were disproportionately allocated to pressing societal issues, such as low birth rates and higher suicide attempt rates among young women. An expert noted,

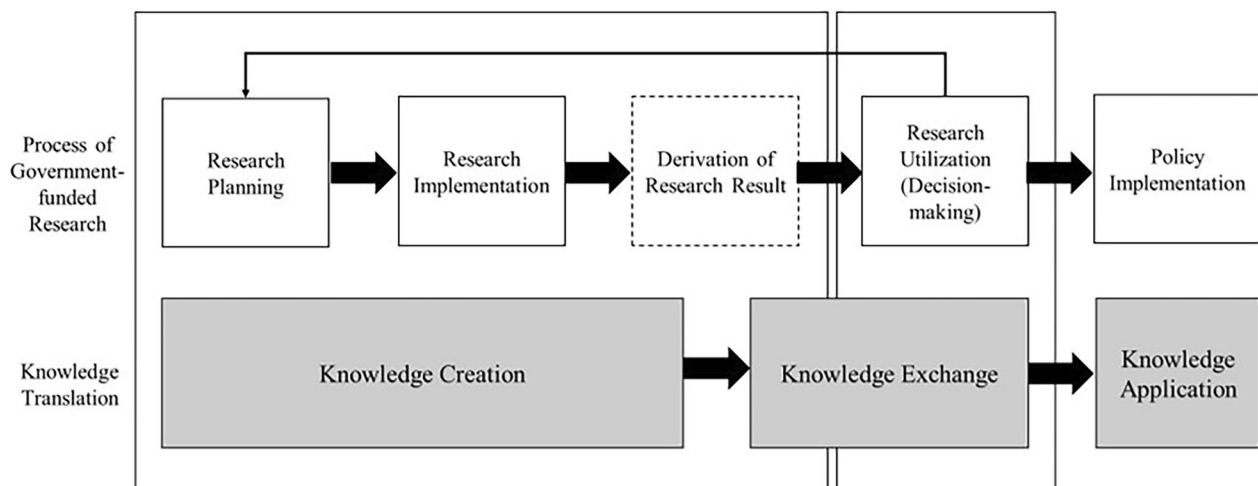


Fig. 1 Flow of knowledge creation in government-funded research according to the knowledge translation stages. The upper flowchart represents the process of government-funded research. The lower flowchart represents the process of knowledge translation; this chart omits the steps after knowledge exchange, since this study focused on knowledge creation. The dotted box indicates a step that has been excluded from this study but is included in practice

Table 2 Themes and sub-themes related to factors influencing knowledge creation

Theme	Sub-theme	Associated Research Process
Funding allocation: non-systematic and temporary approaches	Influenced by political agendas Driven towards urgent societal issues Guided by the interests and influence of leaders	Planning Utilization
Researcher's autonomy: rigidity of selecting research topics and paths to overcoming them	Target-oriented top-down research Marginalization of research topics and development of adaptive strategies	Planning
Researcher's motivation: insufficient rewards and intellectual engagement	Inadequate financial rewards and non-commercial research outputs Insufficient academic recognition Intellectual curiosity	Planning Implementation
Knowledge co-production: necessities and conditions of collaborative efforts	Importance of interdisciplinary research Weak communication between disciplines and the role of intermediary researchers Cooperation between CSOs and academia	Planning Implementation Utilization
Research network: roles and conditions for sustainability and expansion	Research networks as fields for research sustainability and knowledge co-production Various roles and activities for sustaining research networks Importance of multidisciplinary researcher influx and public engagement	Planning Implementation
Utilizing research results: role of institutional conditions	Low utilization of research results Lack of user awareness and accessibility of research results Insufficient policy and legislation	Utilization

“Government-funded research policy is heavily skewed towards urgent and timely societal issues, and I don't believe that they have many general research projects” (P1). In a similar context, several participants noted that media attention can prompt rapid government responses. R3 described a case in which the issue of induced abortion was intensively covered by the media, leading the government to announce a national survey and commitment to related research. R4 noted the lack of proactive government support for occupational health and safety issues uniquely affecting female workers, “In my experience, research on occupational health and safety for female workers becomes a priority only when specific incidents are spotlighted by the media. Funding tends to follow visibility rather than preventive need, which reflects the reactive nature of research policy” (R4).

It was perceived that the allocation of research funding within government-affiliated research institutes was heavily influenced by the personal orientation or political leverage of institutional leadership. First, when directors expressed interest in women's health research or were women themselves, they appeared more likely to prioritize gender-related topics. As one expert stated, “I think we were able to request funds for gender issues because the leader was a woman” (P3). Another participant explained, “The personal perspective of institutional leadership is crucial. We could not have conducted studies on topics such as abortion if the

leaders were not interested in women's health” (R4). Second, directors with strong political influence or close ties to higher-level authorities responsible for research budget allocation were viewed as being in a better position to secure funding for specific research agendas. However, a major drawback identified by participants was the lack of guaranteed continuity in research implementation following changes in government or institutional leadership.

Researcher's autonomy: rigidity of research topics and paths to overcoming them

Government-funded research on women's health focuses on a limited number of topics designated by the government, which hinders the autonomy of researchers when selecting their research topics. “The [government] research funding is determined based on its alignment with specific societal problem-solving goals, leaving us little space to do research freely for academic purposes” (R1). In addition, some participants had to modify their research proposals to fit the framework of government research exactly. One academic criticized the government's proposed research topics as being too goal-oriented, suggesting the need for flexible research proposal channels for researchers.

Due to such constraints, some researchers noted the difficulty of making progress in research topics that are socially important yet often overlooked in research and funding, despite being recognized by researchers as

pressing issues. While sexual and reproductive health is relatively well supported, interviewees pointed out that other areas, such as mental health in older women, health risks among migrant and caregiving women, and eating disorders in young women, remain underrepresented in research and funding.

As one participant noted, “You have to include all the keywords [that interest the government]. Simply mentioning women’s diseases isn’t sufficient to secure funding” (P3), explaining that the participant sometimes avoided including women’s health in project titles to receive funding. As a result, women’s health researchers said that they are often forced to create knowledge in a roundabout way, such as embedding women’s health research within broader research projects or modifying their research to align with overarching policy objectives, including program development or regulatory initiatives.

Researcher’s motivation: insufficient rewards and intellectual engagement

As one researcher explained, “What motivates [researchers] to engage actively in their work are factors such as the amount of funding, successful publication of papers and financial incentive as rewards. Researchers are inevitably drawn to areas where research grants are plentiful or where the results are recognized by the academic community. However, women’s health is not one of those fields” (U2). Most participants said that there was an atmosphere at the university level that actively encourages research with tangible outcomes, such as patents. Some researchers emphasized that, in terms of career advancement, research on women’s health offers few advantages, which contributes to its lower research motivation.

Despite the lack of financial rewards or academic recognition, researchers often described the importance of intrinsic motivation in sustaining their engagement with this area of study. They described a desire to pursue intellectual growth and produce meaningful knowledge as central to their commitment. One participant said, “I mean, who would feel motivated to work on something overly familiar that anyone could do easily? Most of us don’t want to simply repeat what’s already been done – we want to contribute something meaningful. We want to explore deeper theoretical questions” (P2).

Knowledge co-production: necessities and conditions of collaborative efforts

To improve the reliability of findings and ultimately enhance academic integrity, some participants have conducted collaborative research across various disciplines, including sociology, public health, clinical medicine, and engineering. “I prefer [doing

interdisciplinary research] in terms of getting different perspectives, for example, one co-worker who studied public administration gave me an additional methodological perspective” (U3).

However, one expert said, “I don’t think we’ve had enough training or accumulated success stories yet, although I feel that things are changing” (P1), indicating that the culture of collaborative research has not yet fully developed. Most participants said that different views on women’s health often served as a barrier, as researchers were unfamiliar with the perspectives, theories and methodologies of other disciplines. For example, in reproductive health, women’s studies researchers often emphasized sexual and reproductive rights or structural inequality, while public health researchers focused on maternal health issues such as safe childbirth and prenatal care. As one participant noted, “Public health’s perspective of women’s health is very different from that of women’s studies, and it was difficult to converge” (R2). Participants emphasized the need for researchers who can play a mediating role to reduce unnecessary conflicts and facilitate effective communication. However, one researcher noted, “There are, in fact, not many individuals who can act as a bridge [between disciplines]” (U1).

As with interdisciplinary research, participants also agreed on the need for CSOs and academia to co-produce knowledge. Particularly, for younger researchers, co-production with CSOs has already become a part of their research culture. Some experts with experience collaborating with CSOs said that they were able to uncover previously hidden women’s health issues and generate alternative knowledge through solidarity with civil society.

Research network: roles and conditions for sustainability and expansion

The majority of researchers emphasized the importance of women’s health research networks. These networks, which share common interests and goals, help to sustain research topics, assist in recruiting researchers, and secure funding, ultimately activating KC. One participant also underlined the importance of expanding research networks through the influx of multidisciplinary researchers, as it can facilitate knowledge co-production. Participants mentioned the following factors as key to maintaining the stability and sustainability of research networks over the long term: the commitment of network leaders, the specialized expertise and interest of researchers, and mutual support and advocacy.

Most participants also said these research networks have expanded recently due to the influx of new researchers, reflecting the heightened attention to

women's health in academia compared with the past. One participant remarked, "[women's health] has become increasingly popular in recent years. I was surprised because it was a morning in the middle of a hot summer during the COVID-19 pandemic. Still, about 40 people attended the seminar, and [the room] was almost full" (U2). At the same time, however, it is essential to develop institutional support for researchers' career development to ensure that such network expansion can be maintained. Furthermore, public engagement, such as holding public seminars, publishing books and disseminating knowledge through the media, plays a crucial role in enhancing researchers' perception of women's health.

Utilizing research results: role of institutional conditions

The majority of researchers emphasized that their findings were unlikely to be used as evidence for health policy, which discouraged their enthusiasm to continue research. "If the officials who implement policy do not accept [the research findings], then [the knowledge] is useless" (R5). Most participants noted that the factors contributing to under-utilization of research outcomes as policy evidence included a lack of awareness among knowledge users and poor access to knowledge. Various stakeholders, including government departments, industry and healthcare practitioners, can use research findings; however, the limited amount of produced knowledge and a lack of awareness regarding its existence reduce the likelihood of its application. Interviewees stated that the lack of relevant laws, policies or departments also hindered knowledge-to-policy evidence linkage. "If you're studying women's health policy, but there are no laws and policies, then your research doesn't mean anything. Which ministry or department are you going to deliver your findings to? After all, it will eventually become useless" (R5).

Discussion

Our study identified factors affecting KC across all three government-funded research processes, including research planning, implementation and utilization. These factors may act as barriers in contexts such as women's health research, as observed in this study, but could also serve as enablers in other research domains depending on the specific context. The key influencing factors that participants consistently emphasized or that permeated various research processes included a focus on urgent, politicized societal issues rather than ongoing health concerns, insufficient motivation and support for researchers, weak communication within interdisciplinary research teams, and challenges in expanding research networks. The themes identified

in this study were found to be interconnected across multiple stages of the research process, exerting both direct and indirect influence. This suggests the need for a deeper understanding of the factors that support KC throughout the entire research cycle.

Among the themes identified in this interview as influencing KC, the most widely mentioned by participants was the non-systematic and temporary allocation of research funding, which serves as a primary determinant of the scale and direction of research supported by the government. That the amount of funding for women's health research is determined by political agendas, which may differ according to the ruling government party, or by issues unexpectedly visualized through the media, affects the continuity and comprehensiveness of KC. With a limited research budget, the top-down approach to selectively target research topics that tackle urgent societal issues has advantages in terms of cost-effectiveness from the viewpoint of government. However, if KC is narrowly focused on a few selected societal issues, other problems that need to be addressed will be sidelined or isolated from any policy debate [18, 36, 37]. In line with these results, our findings indicate that most researchers perceived women's health as a minor area of concern for the government, which contributes to the difficulties in forming a deeper pool of women's health researchers. To prevent research plans from being shaped by temporary political agendas and one-off issues, research topics should be systematically prioritized on the basis of ongoing health needs and disease burden. Following that, it will be essential to develop medium- to long-term plans through in-depth deliberations with multiple stakeholders, similar to Horizon Europe in the European Union and the Research Institute of Science and Technology for Society in Japan [2, 38, 39].

For research topics that receive little government funding, researchers rely on their own initiative and external funding to create knowledge [40, 41]. Similar to previous studies, our findings demonstrate that experts with an interest in a topic voluntarily form research teams and produce knowledge with financial support from CSOs. However, continued reliance on external funding for topics that fall within research gaps may lead to a further reduction in the amount of government funding, inevitably resulting in a loss of research sustainability and a decrease in knowledge quality [42]. Many researchers expressed strong intrinsic motivation to generate meaningful knowledge; however, this motivation was significantly constrained by external factors such as limited material rewards, lack of institutional recognition, and precarious career pathways. These conditions serve as major barriers that make it

difficult for researchers to sustainably commit to work in these areas. The importance of sustaining researcher engagement has been noted in previous studies as a key consideration for enabling KC, particularly in fields with persistent structural constraints. These studies highlight the need for supportive conditions such as stable funding, secure employment and diversified career pathways, which can help reduce attrition and build long-term research capacity. Addressing these issues may be especially relevant in under-researched areas where institutional support remains limited [12, 43]. Previous studies have also shown that research areas outside of clinical medicine, health financing, and technology development tend to receive less attention within the academic healthcare community. These fields are often characterized by limited funding and fewer opportunities for stable employment, and are frequently perceived as peripheral [44–46]. The lack of incentives for such research acts as a fundamental barrier to establishing a robust KC cycle by undermining the sustainability of research. In under-researched areas of healthcare, improving research conditions, including stable employment opportunities and financial support, may serve as a key step towards removing the most immediate barriers to researcher engagement in these fields [47, 48].

Given that people's health and quality of life result from the interactions of various interrelated causes, such as social determinants of health or health inequalities, it is clear that healthcare is interdisciplinary in nature [49]. Applying an interdisciplinary perspective to healthcare can reveal undiscovered health problems, identify unknown causes of disease and accelerate innovation [50, 51]. However, in line with previous studies, we found that differences in perspectives, definitions of concepts, and methodologies within interdisciplinary research teams often hampered consensus-building. Although researchers recognized the value of co-producing knowledge, they found it challenging to facilitate communication and coordination when conducting collaborative research. Furthermore, interdisciplinary collaborations are known to have difficulties in synthesizing evidence due to a lack of shared expectations for outputs and the varying depth of reviews [52, 53]. Nevertheless, interdisciplinary research teams are needed to coordinate and accommodate diverse viewpoints to facilitate collaboration [54], and it was consistently noted in this study that strengthening communication is practically necessary to achieve this goal.

Finally, expanding the research network has a significant impact on securing the continuity of KC. Researchers, as the individuals who frame and operate

research networks, play a crucial role in broadening knowledge boundaries via KC activities [55]. In women's health research, attracting new researchers and expanding and maintaining research networks is challenging due to financial constraints, career development issues and cultural factors [56–58]. In line with previous studies, we found that researchers from other disciplines are reluctant to participate in research networks owing to these external factors. In fields with a challenging research environment such as women's health, it is crucial to develop career development strategies aimed at actively recruiting and sustaining researchers, and securing long-term investment to support these initiatives [59]. In addition, comprehensive efforts are required to raise socio-cultural awareness of women's health to cultivate and inspire researchers' interest [60].

There are several limitations to this study. First, as this study employed a qualitative design, the findings aim to offer context-specific insights that may be transferable to particular institutional or policy settings. While there may be limitations in achieving full theoretical saturation, we consider that a certain level of thematic saturation was reached. This is supported by the recurrence of key themes and the absence of new conceptual categories in the later stages of data collection. However, as thematic saturation is inherently interpretive, the findings should be understood as preliminary insights derived from the specific scope and context of this study. Second, as this study reflects only the perspectives of researchers and does not include those of a broader range of stakeholders, such as healthcare practitioners, administrators, and CSOs, there may be additional influencing factors that remain unidentified. These diverse perspectives could provide further insights into less visible and more structural factors affecting KC. Nevertheless, since most participants had direct or indirect experience in healthcare service delivery, collaboration with CSOs, and health policy engagement, it could be assumed that a wide range of influencing factors was encompassed.

To the best of our knowledge, this study is one of the few that have specifically focused on KC in the healthcare sector, which has rarely been discussed in this context. By identifying influencing factors in the KC process, this study contributes to expanding the scope of interdisciplinary research in healthcare. The factors identified in this study can be applied to other neglected research topics in healthcare to help conceptualize emerging issues and support the development of a more equitable system for KC.

Conclusion

To bridge the know–do gap in the health policy-making process, it is essential to produce sufficient high-quality knowledge that can serve as policy evidence. The lack of KC can result in an expansion of the know–do gap, leading to worsening health inequalities. This study highlights the policy environment surrounding under-researched areas in healthcare and how such conditions influence researchers and their activities. In particular, the ways in which research priorities are set and funding is allocated offer critical insight into the institutional factors that shape research practice. Significant barriers to KC included a top-down approach to urgent societal issues that are not ongoing health concerns, insufficient motivational incentives for researchers, and weak communication within interdisciplinary research teams. The findings of this study illuminate the conditions faced by under-researched topics and identify the factors necessary to enhance KC. We believe our findings will help reshape and invigorate discourse and research policies on KC in healthcare.

Abbreviations

KT	Knowledge translation
KC	Knowledge creation
EIPM	Evidence-informed policymaking
CSO	Civil society organization

Supplementary Information

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Supplementary Material 1.

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Author contributions

P.J. conceived the original idea for the study and led the study implementation, data collection through interviews, analysis, reporting and article writing; C.S. and K.S. equally contributed to reviewed the protocol, and support the data analysis and reporting; M.H. led interviews and article writing, reviewed the analysis and manuscript, and supervised the overall project. P.J. and M.H. had full access to the data obtained from interviews, and all authors had the final responsibility for the decision to submit for publication.

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Availability of data and materials

No datasets were generated or analysed during the current study.

Declarations

Ethics approval and consent to participate

We provided description of study and a semi-structured question guide and asked for written consent from all potential participants prior to starting

interview. This study received ethical approval from the institution review board (IRB) at the National Medical Center (NMC-2023-02-021).

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

Author details

¹Graduate School of Public Health, Seoul National University, 1 Gwanak-Ro, Gwanak-Gu, Seoul 08826, South Korea. ²Department of Preventive Medicine, Korea University College of Medicine, 145 Anam-Ro, Seongbuk-Gu, Seoul 02841, South Korea. ³Department of Preventive Medicine, Inje University College of Medicine, 75 Bokji-Ro, Busanjin-Gu, Busan 47392, South Korea. ⁴Public Healthcare Research Institute, National Medical Center, 245 Eulji-Ro, Jung-Gu, Seoul 04564, South Korea.

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