Stereotypes among health professions in Indonesia: an explorative study

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Purpose: Effective and efficient health services require efforts to increase collaboration among health professionals. One of the barriers to effective collaboration is stereotypes. Stereotypes represent perceptions or perspectives about a person or group of people. This study aims to explore the perceptions of health professional students and practitioners regarding stereotypes.
Methods: This was a qualitative study using a phenomenology approach. A sample of health professions students from both preclinical and clinical stages, as well as health practitioners, was selected using a maximum variation sampling method. Primary data collection was conducted through focus group discussions. Data obtained were analyzed using thematic analysis. A total of nine focus group discussions were conducted.
Results: Four themes were identified from this study, including the types of stereotypes, factors affecting stereotype formation, the implications of stereotypes, and how to overcome stereotypes. Stereotype formation was affected by the lack of understanding of other health professions' roles, hierarchical culture, personal experience in receiving healthcare, and community view. Stereotypes among health professionals created obstacles to healthcare team communication and reduced self-confidence in certain health professionals. These stereotypes may be overcome through competency development and knowledge sharing among professionals as well as through education on other health care professionals' roles and competencies so that each profession possessed similar goals for patient safety.
Conclusion: Both positive and negative stereotypes negatively affected collaboration. Stereotypes were greatly affected by multifactorial causes. Therefore, understanding other professions' roles and conducting interprofessional education are important to overcome stereotypes.

Key Words: Stereotyping, Collaboration, Interprofessional

Introduction

One of the keys to comprehensive and efficient health services is effective collaboration among health professionals. The collaboration of health professionals can improve the quality of patient management and patient safety while improving cost efficiencies in the health care system [1,2]. However, several barriers to collaborative practices have been identified. These barriers occur at the organizational, team, and individual levels. One obstacle stemming from individuals is stereotyping [3,4].

Stereotypes are selective perceptions (perspectives, images) about a person or a group of individuals [5,6]. Stereotypes about professions are defined as views or representations of the profession, both positive and negative, that affect individual attitudes [7,8]. Positive stereotypes emphasized on the positive traits and understated the errors of an individual or a certain group. A negative stereotype is a negative assessment of an individual or group that can cause prejudiced behavior towards that individual or group [5,6]. There are three characteristics of profession stereotypes: autostereotypes (stereotypes of an individual's own profession); heterostereotypes (stereotypes towards other professions group); and perceived heterostereotypes (stereotypes about other professions that are believed by other professions) [9,10].

Stereotypes can be formed from the direct observation of individuals in society or information presented by the media. The formation of professional stereotypes is also influenced by past experiences or memories (as patients) of childhood care, historical influences such as certain gender dominance, and government laws regarding the dominance of certain professional responsibilities [6,10]. Stereotypes influence individuals in processing and interpreting information and decision making in teams. Stereotypes can also result in an individual's reluctance to accept advice from other professions, thereby inhibiting collaborations [10].

Stereotypes may change when individuals gain new information or experiences that are different from previous understandings. Interprofessional education (IPE) provides opportunities for students from different professional groups to interact under conducive conditions so that positive changes occur in interactions with other professional groups. This is consistent with the contact hypothesis, which states that the interaction of different groups of individuals may overcome the formation of stereotypes [10].

Several studies have been conducted to assess the effectiveness of IPE in reducing student stereotypes and found a variety of evidence. Research conducted by Carpenter [8] stated that there were significant differences in stereotypes after IPE implementation, whereas Barnes et al. [11] found the opposite. This difference possibly occurred because students already have initial stereotypes of various professions, which are not necessarily accurate, prior to an interaction. Therefore, the present study aims to explore the perceptions of students who have undergone IPE modules, in the preclinical and clinical phases, and also health practitioners with collaborative work experiences on stereotypes of healthcare professionals.

Methods

1. Context

The present study was conducted at one large medical school in Bali province and its main teaching hospital. The IPE module (course) is given at the academic stage (preclinical) beginning in semesters 3 as well as at the clinical stage. At the academic stage, the module is attended by seven study programs (medicine, nursing, pharmacy, physiotherapy, psychology, dentistry, and public health). The IPE module is conducted using a community-based approach by exploring the health problems of a family in communities around campus and collaboratively providing alternative solutions to these health problems.

2. Study design

This was a qualitative study using a phenomenological approach, conducted between February to May 2019,

with the focus of exploring real experiences or phenomenon experienced by the respondents in order for the researchers to obtain the perspectives or perceptions of those experiencing it and to understand the phenomenon as viewed by the respondents [12,13]. The phenomenon being explored here is the stereotyping of health professionals as experienced by students and health practitioners alike when they interact and work together with different professions. Individuals observe or experience stereotyping differently in various contexts; therefore, each individual may develop different understanding or model of stereotyping which is grounded in the individual subjective experience [14].

3. Study participants

Participants were selected using the maximum variation sampling technique based on the representation of schools and professions in order to capture the perspectives of people from various background with different experiences. There are three types of participants in this study: (1) academic (preclinical) students (medicine, nursing, and pharmacy) who have taken the IPE course; (2) clinical students, i.e., students who have passed the academic phase of the IPE course and have undergone at least two semesters of clinical phase (medicine, nursing, and pharmacy); and (3) health practitioners (doctors, nurses, and pharmacists) with experience in providing collaborative patient care with the aforementioned three professions and have at least 5 years of work experience in the hospital. A total of 24 preclinical students, 24 clinical students, and 23 health practitioners participated in the focus groups.

Each focus group consisted of participants from the same school or profession (uniprofessional); hence, there were three preclinical students focus groups (medicine, nursing, and pharmacy), three clinical students focus groups (medicine, nursing, and pharmacy),

and three health practitioners focus groups (medicine, nursing, and pharmacy) with a total of nine focus groups. Each uniprofessional focus group consisted of eight participants with a relatively balanced proportion of female and male respondents, except for the pharmacist (health practitioners) focus group which involved seven respondents. The preclinical student participants age ranged from 19 to 22 years old, with the average of 20.88 years old, whereas that of clinical student participants ranged from 22 to 24 years old (average of 23.08 years old). The student participants age reflected the average age of students in each particular phase of study.

The health practitioner respondents were 44.52 years old in average, with 16.61 years as the average of the length of working experience. Most of the health practitioners have a professional degree as a pharmacist or nurse (12 participants, 52.17%), five of them (21.74%) obtained a master/specialist degree, and the rest of the health practitioners participants hold doctorate/subspecialist degree (six participants, 26.09%). Participant sampling is important in this phenomenology study to ensure that health practitioner participants have adequate experience in collaborative practice as reflected in the age and years of working experience, but also varied in terms of the highest educational degree obtained, since the individual subjective experience contributed in shaping the stereotypes as perceived by each participant.

4. Data collection

Data collection was performed by conducting focus groups with each of the nine groups described above. The participants are grouped into uniprofessional groups in order to provide a more supportive and conducive environment for expressing thoughts and opinions in regards to the interprofessional collaborative practice. The number of focus groups were maximized to include

Table 1. Lists of Probing Questions in Focus Group Discussions

	Questions
Opening questions	How would you describe the IPE implementation or collaboration practice you have experienced so far?
Main questions	What do you think stereotype means?
	Can you give examples of negative and positive stereotypes?
	How is your stereotype-related experience when receiving (and providing) healthcare service?
	Explain the impact of stereotypes on collaboration and health services
Closing questions	What do you think a good form of collaboration is?

a wide array of respondents from different professions and different stage of professional career. Krueger and Cas [15] suggested to start with three focus groups for each type of participant; therefore, nine focus groups in total were organized. The focus groups used a semi-structured guide based on the literature on stereotypes in healthcare professions (Table 1). The duration of each focus group ranged from 60–90 minutes, in which one researcher served as the moderator. Following participants' consent, another researcher recorded the session. Each recording underwent verbatim transcriptions after each focus group.

5. Data analysis

Data analysis was conducted immediately after each focus group. Data analysis began with the transcription of focus group recordings, which were presented in text form and written in full sentences to facilitate analysis. The results of the transcription were given to the respondents. The validity of the data was established through triangulation and member checking [13]. A member checking was conducted by asking the respondents for their opinions on the accuracy of the analysis results to ensure that the analysis was congruent with the respondents' meanings. Data triangulation in this study was obtained from the inclusion of different health professions and different health professions education program as participants. The validity was also strengthened by the existence of the researchers in each

step of data collection in which the researchers discussed the key findings and revisited the theoretical frameworks of stereotyping and its relevance to IPE and inter-professional collaborative practice.

The themes were determined inductively based on data obtained from the study as well as deductively based on literature, existing theories, and research results. After the focus groups transcriptions were completed, they were analyzed to identify key themes. Independent thematic analyses to ensure the validity of the data were conducted by D.S. and A.F. on the first transcript of each group (preclinical students, clinical students, and health practitioner). The authors identified themes consist of explicit meanings of what the participants had mentioned, as written in the transcription [12]. Each of the author independently listed identified themes and subthemes, and any disagreements between the two independent analysis were discussed and resolved. The subsequent thematic analysis process was completed using the pre-agreed themes. After the themes and subthemes were agreed upon, the analysis of all transcriptions was continued by S.D. Any additional subtheme or theme emerged from the subsequent analysis were discussed with all of the authors. The first focus group revealed eight subthemes, three new subthemes emerged in the second focus group discussion, and new subthemes continued to be identified until the sixth focus group, where in total 17 subthemes have been identified. The analysis on the remaining three focus

group transcripts did not produce any subthemes, which suggested data saturation. The authors reviewed all identified themes and subthemes and matched them to the theoretical framework used in this study to ensure the comprehensiveness and adequacy of the data.

This research obtained ethical eligibility from the Faculty of Medicine at Udayana University (no., 192/UN14.2.2.VII.14/LP/2019). Informed consent forms were completed by the respondents and all data is kept confidential.

Results

Since there were no differences in the perceptions on stereotypes based on the participant groups, based on the combined results of the focus groups, the identified themes and subthemes related to stereotypes were listed in Table 2 along with the number of quotes for each respective theme/subtheme. The four themes include the type of stereotypes, factors that influence the formation of stereotypes, stereotype implications, and how to overcome stereotypes.

Table 2. Identified Themes and Subthemes

Themes	Subthemes	No. of quotes
Types of stereotypes (positive and negative)		
Stereotypes of doctors	Positive stereotypes as stated by doctors	14
	Positive stereotypes as stated by nurses	8
	Positive stereotypes as stated by pharmacists	2
	Negative stereotypes as stated by doctors	5
	Negative stereotypes as stated by nurses	6
	Negative stereotypes as stated by pharmacists	15
Stereotypes of nurses	Positive stereotypes as stated by doctors	3
	Positive stereotypes as stated by nurses	7
	Positive stereotypes as stated by pharmacists	2
	Negative stereotypes as stated by doctors	11
	Negative stereotypes as stated by nurses	3
	Negative stereotypes as stated by pharmacists	1
Stereotypes of pharmacists	Positive stereotypes as stated by doctors	4
	Positive stereotypes as stated by nurses	4
	Positive stereotypes as stated by pharmacists	7
	Negative stereotypes as stated by doctors	4
	Negative stereotypes as stated by nurses	2
	Negative stereotypes as stated by pharmacists	2
Factors affecting stereotype formation	Lack of understanding about other professions' roles and responsibilities	19
	Healthcare settings	13
	Hierarchical culture	7
	Prior experience in receiving health service	19
	Community views	20
Implication of stereotypes	Reduces self-efficacy in certain professions	6
	Inhibits communication among team members	4
Means to overcome stereotypes	Getting to know the roles and competencies of each profession	7
	Improves professional competence	6
	Knowledge sharing	6
	Setting similar goals	5

1. Theme 1: types of stereotypes (positive and negative)

There are two types of stereotypes: positive and negative stereotypes. Positive stereotypes are described as positive appraisal towards another profession; conversely, negative stereotypes involve a negative perspective towards another profession.

1) Stereotypes of medical doctors

Respondents stated that medical doctors were more competent and independent, possessed high academic achievement, acted as leaders and decision makers in the healthcare team and were considered to hold a noble profession.

"Doctors are more competent than other health professionals. One of the requirements for being top management in a hospital is usually a medical doctor degree, not that of another profession." (mda_preclinical medical student_fgd1-p9)

Other respondents provided some negative stereotypes of medical doctors, i.e., they are dominating, arrogant and that they underestimate and overrule other professions.

"Doctors feel that they know and can determine everything. They may diagnose the patient and propose treatment, but each profession has its own roles and responsibilities." (mfc_preclinical pharmacy student_fgd1-p15)

2) Stereotypes of nurses

Respondents stated that nursing is a noble profession involving closer relationships with patients. Nurses were viewed as communicative and appreciative towards other

professions. Negative stereotypes were also identified in this study, i.e., nurses were less competent, owned fewer initiatives, and only followed doctors' orders. This demonstrated that their roles mainly involve assisting medical doctors in providing patient care.

".... I feel that nurses are mainly doctors' assistants. During patient visits, nurses provided doctors with their stethoscope, reported the complete patient history, and then doctors would give orders for nurses to follow." (ppb_clinical nursing student_fgd6-p2)

3) Stereotypes of pharmacists

Most respondents stated that pharmacists were the most knowing regarding regiments and interacted well with doctors regarding patient treatment. However, there is a negative stereotype of pharmacists in which they are only involved in giving the medication without providing adequate information about the medication to patients.

"Pharmacists were strongly related to regiments for patients' therapy. They sometimes recommend alternative regiments if the prescribed medication is unavailable." (pdf_clinical medical student_fgd7-p6)

"Pharmacists rarely explain to the patients about the medication given, ···. Nurses who explain how to take the medication and the side effects, the pharmacists only give the medication." (pe_nurse_fgd5_p8)

2. Theme 2: factors affecting stereotypes formation

Several factors were identified in stereotype formation, i.e., lack of understanding about other professions' roles and responsibilities, healthcare settings, hierarchical culture, prior experience in receiving health service, and

community views regarding certain professions.

1) Lack of understanding about other professions' roles and responsibilities

Most respondents explained the interrelated roles among doctors, nurses, and pharmacists. The relationships between the roles were in the form of instructions, doctors diagnosed and give instructions to the nurses, doctors then prescribed and pharmacists give the medication based on the prescriptions. The respondents have not yet understood that nurses have roles in developing and implementing nursing care and there are clinical pharmacists who have the rights to be involved in patient care.

"What I know, nurses help doctor, execute doctors' order, just like doctors' helpers." (pfg_clinical pharmacy student_fgd9-p6)

"Pharmacists should just read doctors' prescriptions and give medication based on the prescriptions; they do not need to explain it to the patient to avoid conflict between the two professions." (mdf_preclinical medical student_p15)

2) Healthcare settings

Healthcare settings implement a tiered system from interns to residents to consultants. In certain settings, it takes so much time to conduct this multilevel system because sometimes it was difficult to reach consultant doctor. Furthermore, history taking and physical examination are conducted repeatedly by different people; thus, patient thought that the doctor is less professional because of the longer service times.

"The patient flow was tiered from interns to consultants. The physical examinations conducted were repetitive

and it took a long time for diagnosis and treatment" (pdf_clinical medical student_fgd7-p2)

In emergency setting, there are patient care standard operation procedures for each profession causing less possibility for stereotype formation than in the ward.

"In the emergency room, patient care standard for doctors and nurses were written. Doctors do not need to give a lot of instructions. However, in the ward, doctors tended to rule nurses." (pe_nurse_fgd6_ p8)

3) Hierarchical culture

Some respondents suggested that hierarchical culture, with the doctors' position being the highest level of decision making in health care, causes stereotypes. The existence of a profession that involves superior and subordinate roles raises inequality. This hierarchical culture causes the formation of negative stereotypes of doctors.

"Doctors are more dominant and feel superior compared to nurses. Nurses should be in line with doctors and other professions, no more pyramid principles, no subordinates" (ppa_clinical nursing student_fgd6_p7)

4) Prior experience in receiving health service

Respondents stated that their own experiences when seeing a doctor led to the formation of the stereotypes that doctors are less communicative and nurses are closer to patients.

"⋯ The doctor was indeed very busy, so he just came, talked a little and immediately moved to the next room. Meanwhile, I came to know a nurse who made me feel comfortable discussing my complaints with her." (mda_ preclinical medical student_fgd1_p13)

5) Community views

Respondents obtain information about the stereotypes of health professions from families, surrounding communities, and the media. This information formed the initial stereotypes regarding the professions of nurse, doctor, and pharmacist.

"Our community only sees a nurse as a doctor's assistant, and even a smart nurse would still be a doctor's subordinate. These stereotypes are common not only in ordinary people but also in educated people. Indonesian parents will definitely direct their children to become doctors rather than nurses." (ppb_clinical nursing student_fgd6_p6)

"People think pharmacist as those who sell drugs in the pharmacy." (mfd_preclinical pharmacy student_fgd2-p10)

"People think doctors can do everything from diagnosis to providing medication, whilst we know that in giving medication, doctors work together with pharmacists." (pff_pharmacist_fgd9-p5-6)

3. Theme 3: implications of stereotypes

In the present study, several respondents stated that stereotypes inhibit communication among health care team members. For example, doctors who have negative stereotypes of nurses will not believe the information conveyed by nurses.

"Think of the impact of stereotypes on communication. If the doctor has a negative stereotype of nurses or other medical personnel, communication between medical personnel does not go well. Doctors do not believe in what other health workers communicate. The doctor

thinks he is smarter, he knows better. So, the impact of this stereotype is communication that does not run in both directions." (ppc_clinical nursing student_fgd6_p9)

Stereotype also influences one's self confidence. The low self confidence will then lead to impaired healthcare services.

"When he/she is not confident on doing something, it will affect his/her performance. It will cause human error which affects patients." (ppe_clinical nursing student_fgd6_p9)

4. Theme 4: means to overcome stereotypes

Based on the respondents' opinions, four methods of overcoming stereotypes were identified. Two methods originate from within the respondents themselves through increasing self-competence and getting to know the roles and competencies of other professions. Another method of overcoming stereotypes is to set similar goals for the healthcare team and share knowledge among health professionals.

"Knowledge sharing with nurses gets a positive response. They feel not only ordered or asked to do something but considered equal. Whatever their position, they are part of the teamwork. Equal teamwork. An appreciation that mutual relationships like this will guarantee that the work we do together will be successful because of mutual respect." (df_physician_fgd8_p4)

"The first factor is from within ourselves whether we acquire the knowledge of our profession. Once we have the knowledge, we will be more confident." (ag_pharmacist_fgd3_p7).

Discussion

A stereotype is defined as a view or thought towards an individual or group that underlies a person's attitude towards that individual or group [16]. The results of this study indicated several stereotypes of doctors: competent, hold a leader role, decision maker, and person in charge of the patient. The results of this study are similar to the research of Hean et al. [17], which stated that doctors were considered to have higher abilities in leadership, self-confidence, decision making, and academics.

Respondents stated that nurses were stereotyped as caring and had a closer relationship with patients as well as less competent, with their main role being to assist doctors. These stereotypes were in line with the results of Sollami et al. [18], who stated that nurses judged their profession as caring and compassionate with patients because of the intensive interactions with them. However, Ateah et al. [1] stated that nurses were judged as being less competent, possessing limited initiative, and only took doctors' orders. These stereotypes were caused by their increased work load due to the limited number of nurses, thus impacting the quality of nursing care [19,20].

The stereotypes of pharmacists provided by respondents implied that they are considered to be the most knowledgeable about medicine, albeit the lack of opportunities to explain the medication to the patients because there are limited number of pharmacists. There has been a change in paradigm regarding pharmacists, from a drug-oriented approach to a patient-oriented approach in form of communication, information, and education as patient care. This paradigm aims to increase pharmacists' interactions with patients and other health professionals [5].

The finding of this study shows that positive stereotypes of doctors were mostly mentioned by doctors, and the same applies to positive stereotypes of nurses. Whereas negative stereotypes of doctors mostly came from pharmacists and those of nurses were mostly mentioned by doctors. This result demonstrates that positive stereotypes were mentioned more frequently by the same professions (autostereotype) than by different professions (heterostereotype). This is in line with self-categorization theory, which states that intergroup discrimination occurs when each individual judges their in-group higher than an out-group [6,17]. This discrimination occurs due to the ignorance of the individual towards other professions outside their group while having more knowledge about the role of their own profession [6].

The respondents stated that stereotype formation was affected by the media, prior experience, public information, healthcare settings, and hierarchical cultures in hospitals, which place doctors as leaders and the highest decision makers. A similar study also reported that stereotypes were affected by factors such as the media, elders' opinions, surrounding environment, and previous experiences as patients or their companions [21]. According to the cultural model of Hofstede [22], Indonesia is a country with high characteristics of power distance, meaning that Indonesian people rely on hierarchy and express a positive attitude towards unequal power in society [22]. This high-power distance in the form of hierarchical culture was also reported in the health care service context [23,24]. Hierarchical culture in health system should not affect stereotype when the focus was to provide patient-centered care. The leader of healthcare team in patient-centered care could be from any health professions depending on patients' problems. It means that each health profession should know their roles and should never feel more powerful

than other professions [24,25]. Soemantri et al. [23] in their study on the factors influencing interprofessional collaborative practice in hospital also found that there are several systemic factors related to the management of health services in the hospital which inhibit the interprofessional collaborative practice such as a lack of standard operating procedure, unsynchronized regulations and inefficient task distribution. These factors would make interprofessional collaboration in a tiered or multilevel system even more difficult as identified by the respondents of this study.

The implications of negative stereotypes among doctors and nurses affected how doctors mistrusted nurses' opinions in determining patient care decisions. This situation hinders communication between team members, thereby resulting in misinterpretation, slow response, and failure to complete tasks [16,26,27]. These implications of negative stereotypes may be overcome through knowledge sharing regarding the roles of other related professions and their clinical competence [28].

Another implication of stereotypes described by the respondents was low self-confidence among certain professions. A study conducted by Ateah et al. [1] demonstrated that negative stereotypes among nurses affected the development of self-efficacy, job satisfaction, and performance, and may alter behaviors of nurses in practice. Improving self-competence has been known to reduce this negative effect of stereotypes. Through improving self-competence, students may gain self-confidence in their work [29].

The identified themes and subthemes did not indicate any differences of perceptions of different group of respondents, despite the fact that the students have undergone an IPE program. The concept of stereotypes was formed before students were admitted to the university and lasted throughout the educational process [8,20]. Therefore, students in health profession education

programs must obtain introduction sessions on the roles and responsibilities of various health professions through IPE, to correct the misperceptions regarding other professions' competencies as reflected in this study. During IPE, students are also taught about taking different perspectives, as it bridged differences among groups by viewing problems through others' perspectives [30,31]. Moreover, each individual must be able to conduct self-reflection to increase their self-awareness and respect others. Self-reflection skills helped individuals to be empathetic and consider others' perspectives [31,32]. The findings of this study suggest that IPE course should tackle intrapersonal and interpersonal dimensions. For example, low self-confidence will influence the formation of stereotype; thus, assessment of individual's personality is likely to be useful. The course can then continue with learning to understand the roles and perspectives of other healthcare professionals through creating time and space for reflection which will lead to reflective and transformative learning [33].

1. Study limitations

The authors realize since this study was conducted in a single institution, the results may not be generalizable to other settings. However, this study provided results related to the formation of stereotypes in health professions that interact most frequently in the context of healthcare delivery from the perspectives of both students and health practitioners. The results of this study represent the realities of the field as well as the challenges in conducting IPE. Moreover, data collection was conducted in detail and data analysis was comprehensively conducted to be reproduced in other settings.

2. Conclusions

Stereotypes among health professions exist and are formed through multifactorial processes and implicated in healthcare team collaboration. This study highlights that positive and negative stereotypes may negatively affect interprofessional collaboration. The domination of autostereotypes in positive stereotypes and hetero-stereotypes in negative stereotype suggest that health professions need to develop perspective-taking and reflective skills, respect for others, and awareness of personal biases. Equipping healthcare professionals with the knowledge of each profession roles and respon-sibility is required to help preventing the development of stereotypes.

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