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Interprofessional Collaboration in the Management of Scabies Re-infestation: A Single Case Study in a Rural Area of East Nusa Tenggara Province, Indonesia

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CASE REPORT

Mr. A presented with complaints of itching and reddish patches on his stomach, palms and fingers for about three weeks. The patient had been diagnosed with scabies infestation three times before and had previously been declared cured.

Dermatological exam on this patient showed erythematous papules, rounded, well-defined, discrete spread and multiple measuring 0.2 x 0.2 cm on patient's hand fingers, palm and abdomen. Excoriation and lichenification were also noticed (Figures 1, 2 and 3).

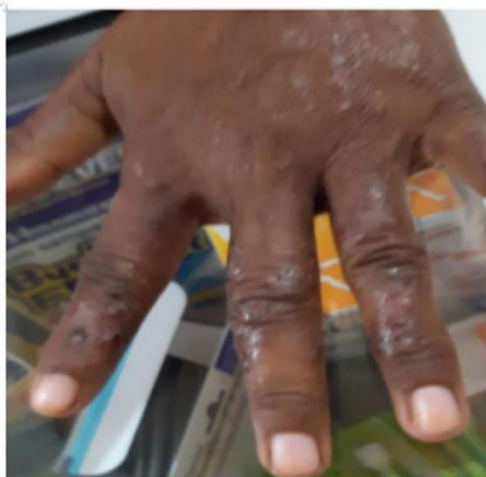


Figure 1. Scabies reinfestation on patient's palm.



Figure 2. Scabies reinfestation on the back of patient's hand and fingers.

The presence of cuniculi were no longer found and some parts had undergone lichenification, marked by darkened skin color due to chronic scratching.

The patient is a clove trader who often goes from one village to another to collect cloves. Every time he stops in a village, the patient will stay at a relative's house. He never brings personal towels and gloves while traveling. Often the towels and sarongs that are used by the host are lent to him. He always borrows towels and sarongs from the owner of

the house where he is staying. Every time he comes home from traveling, the patient will suffer from itching which causes his wife and children to also get similar itching.

FORMULATION OF THE PROBLEM

Scabies is a skin disease caused by *Sarcoptes scabiei* variant hominus. The clinical manifestation that appears is a very intense itching sensation on the erupted skin accompanied by the appearance of papules, nodules and vesicles¹. The World Health Organization (WHO) included



Figure 3. Scabies reinfestation on patient's stomach.

scabies as one of the neglected tropical skin diseases in 2013. The incidence of scabies in the world based on Global Burden Disease in 2015 is 204.15 million². In 2017, the total incidence of scabies was 175.4 million³. Scabies contributed 0.21% to the reduction in quality of life calculated through disability-adjusted life-years (DALYs) in all conditions studied by Global Burden of Disease 2015. In Indonesia, the prevalence of scabies in 2008 was 5.60% - 12.96%. In 2009, the prevalence of scabies was 4.9-12.95% and the latest data obtained from the prevalence of scabies in Indonesia in 2013 was 3.9 - 6%. Although the prevalence of scabies has decreased from year to year, it is still ranked the third most frequently occurring skin disease out of the twelve main skin diseases identified in Indonesia⁴.

The prevalence of scabies in East Nusa Tenggara, a province in the eastern area of Indonesia, is not specifically recorded because it is put together in the category of unspecified skin diseases, where other skin diseases are included in the top 10 diseases (3.56%)⁵. Medical records data of one Medical Center in Ende Regency, East Nusa Tenggara Province shows that there were 1,257 cases of scabies from January to December in 2019. Out of all of the cases, 421 cases were reinfestation of scabies. The definition of scabies reinfestation is scabies manifestation that occurs after the previous scabies infection was declared cured⁶.

Scabies treatment is easy and has a high cure rate, but it is not massive and simultaneous, reinfestation and sequelae can occur easily. Itchy sensations are very intense, especially at night causing the decreasing quality of a person's sleep which has an impact on their performance on the next day. Other possible sequelae include cellulitis, abscesses, and even bacteremia and sepsis⁷. Further impact includes worse skin damage, disability, stigma, and socio-economic problems⁸. Considering that the neglected impact of scabies is quite extensive, scabies management requires collaboration from various professions or by the approach also known as Interprofessional Collaboration (IPC)⁹.

The definition of IPC is a form of health care that requires a variety of health professionals from different backgrounds to collaborate in providing comprehensive and integrated health care services, involving patients, families, careers and communities, to improve health services in individual, family and community settings. It requires at least two different health professions to perform IPC. Interprofessional collaboration has four domains including roles and responsibilities, values/ethics, communication, and teamwork¹⁰. Several studies have shown that effective collaborative practice can improve access to and the coordination of health care services, including services for patients with chronic diseases, efficient referral systems and patient safety, in hospitals¹¹ and communities^{12,13}. IPC can also reduce complications experienced by patients, length of hospital treatment, staff turnover, undesirable events and mortality^{14,15,16}.

Scabies reinfestation cases are best managed by the doctors, clinical laboratory assistants, pharmacists and nurses who collaborate to perform history taking and physical examinations, supporting examinations such as skin scrapings, determining the diagnosis and prescribing of drugs, compounding topical drugs and explaining drug usage, and educating the patient about the importance of personal and environmental hygiene. The results of IPC in treating the patient resulted in resolving the scabies syndromes, healed his excoriations and healed any skin secondary infections. The patient was well informed to be able to prevent the scabies transmission to his closest family members and friends and he also did not show any signs and symptoms of scabies reinfestation.

This research was qualitative research with a single case study method. The single case study provides better understanding of the case by revealing specific, unique, and detailed aspects¹⁷. The research objective was to explore the management of scabies reinfestation using an IPC approach at the Lio Sehat Medical Center, in East Nusa Tenggara Province, Indonesia. The researchers had the theoretical presupposition that if the IPC domains, namely values, teamwork, communication and roles and responsibilities, were implemented in the management of scabies, then the result of the treatment will be more optimal.

The case is about a 30 year old male who had scabies reinfestation. He suffered from scabies manifestation three times before and had previously been declared cured after receiving treatment. However, he revisited the clinic approximately a month later with the exact same complaints as before and was diagnosed as scabies reinfestation.

The case was chosen because it was a good example of how scabies can reinfest in someone for multiple times when preventive measures were not taken. It also showed how someone's lifestyle and daily habits, including local culture, can contribute in scabies reinfestation. The management of this case is best approached by applying IPC to ensure optimal services both in curative and preventive approaches.

Purposive sampling technique was used to select informants

based on inclusion and exclusion criteria. The inclusion criteria were doctors, laboratory assistants, nurses and pharmacists who are currently working at the Lio Sehat Medical Center, involved in the management of scabies reinfestation cases using an IPC approach and willing to participate. Meanwhile, the chosen scabies reinfestation case was the one patient who was willing to participate and who did not have other comorbidities.

The research was conducted at the Lio Sehat Medical Center located in Ende district, East Nusa Tenggara during its working hours. Study of medical documents was conducted before the observations and interviews. It consisted of studying patient's medical records and the Standard Operational Procedures (SOP) of the clinic related to IPC in the management of scabies. The patient's medical records were studied to ensure that he was diagnosed as scabies and had recovered before having another current manifestation (reinfestation). The observations on the case management were performed involving five informants during clinic working hours. Each informant was interviewed twice, with the first interview was performed right after the case management and the second after two weeks to clarify their statements. Data saturation was achieved in the data analysis process when no new theme was obtained and the experiences that were documented begin to have similarities or repetitions.

Prior to conducting the research, all of the subjects who met the inclusion and exclusion criteria are made aware about the steps of the research. Only those who were willing to participate were included in this research. All of the subjects gave permission to be observed, interviewed and documented by signing the informed consent forms.

The data were analyzed using the interpretive approach. This analysis was done first by identifying domains in the collected information to obtain specific emerging themes. The emerged themes were then interpreted based on the number of scabies cases and the IPC approaches in currently existing theories. Furthermore, a summary was made based on all the existing data to not only see the facts but also to find the connections among them. To ensure the data validation, a triangulation process was performed comparing the data obtained from observations and study documents. Reflexivity was shown by the involvement of other researchers from different backgrounds such as family doctors and public health experts. Data analysis related to scabies reinfestation cases, especially in personal and community transmission, involved an expert in Family Medicine and Primary Health Care. Meanwhile, the data analysis regarding the IPC approach in managing this case involved a Public Health expert.

This study has several limitations. The selection of research subjects was limited in the number of subjects and types of health professionals working in the study site, also the varying length of work period and experience in implementing interprofessional collaboration which is less than 12 months. The number of scabies reinfestation cases that were managed using an IPC approach were only one case so that the results could not represent all cases of

scabies re-infestation who are managed similarly.

Apart from these limitations, the single case allows the researchers to conduct a focused observation. The small number of research subjects allows researchers to conduct in-depth interviews well. Those reasons make this case study able to reveal specific, unique and detailed aspects such as cultural elements that affect scabies reinfestation in a person, the specific myths that make it difficult to maintain personal hygiene, underestimation of scabies and impacts of implementing IPC. The data validation of this study used several techniques such as data triangulation, member checks and debriefing. Two other researchers were also involved to confirm the data, thereby validating the trustworthiness of this study results.

DISCUSSION

1. SITUATION REGARDING SCABIES REINFESTATION MANAGEMENT WITH CURRENT IPC APPROACH AND THE OBSTACLES

Many cases of scabies are still found and the incidence of scabies manifestation and its reinfestation are still common. Djuanda et al. in 2018 in their book explained that the causes of scabies manifestation are limited clean water, poor hygiene behavior, and a big number of occupants in one house¹⁸. In a case study of Mr. A's scabies reinfestation, similar factors were found, such as low personal and environmental hygiene. Limited water was not a problem in Mr. A's case. This is the same as found by Walton et al. that living in areas with an abundant supply of water such as the Salomon Islands area does not guarantee that the population is free from scabies¹⁹. However, there are cultural factors in Mr. A's case such as the fear of catching flu, coughs, colds and rheumatism when regularly showering or being in long contact with water while washing, making it difficult for many people in certain areas to maintain personal and environmental hygiene. This explains why certain areas have a large number of people with scabies which become the source of transmission and reinfestation to other people. Besides, people have a mindset that tends to see scabies as a regularly normal itch and underestimates it. This is in line with what was written by Chandler and Fuller that the World Health Organization included scabies in the Neglected Tropical Disease (NTD) category in 2017²⁰. It is because scabies is considered harmless since a long time ago. This mindset ultimately makes it difficult to prevent scabies manifestation and its reinfestation because people do not feel threatened by scabies²¹.

As a private primary health facility that has been operating for 10 years, the age of medical personnel working at Lio Sehat is ranging from 25 to 35 years old with 3 to 5 years of work experience. This is important to be noted because the characteristics of the research subjects also influence the dynamics of IPC. A better understanding of the exploration of the application of IPC will be easier to obtain if the complexity of the respondent's characteristics is fully appreciated. At a relatively young age with new work experiences, it is easier for research subjects to collaborate

because the traditional hierarchical pattern of the medical world has not yet been formed firmly. This is in line with the suggestion by Soemantri et al. that the introduction of IPC implementation to all health professions in certain health facilities should be started as early as possible before fundamental differences begin to be identified and take root²².

The IPC approach in the management of scabies reinfestation also involves the patient in discussions to find the causes of scabies reinfestation. This is an important element in the value / ethical domain where one of the concerns are the patient's involvement in the process of treatment and recovery.¹⁸ This involvement allows the more suitable solutions in line with patient culture, habit and daily routines. An explanation is given to the patient to reduce his tendency to underestimate scabies and becomes more serious in preventing transmission to his closest ones. The patient also experienced behavioral changes in implementing preventive measures against further scabies transmission. Patient involvement in a treatment process with the IPC approach can result in better treatment impacts such as adherence and compliance to treatment regimens and changes in behavior to support the healing process²³.

The domain of communication is the most important in an IPC. Communication between professions in the management of scabies cases follows the SBAR pattern which is considered to facilitate the delivery of information. SBAR communication is an easy-to-remember pattern to convey a patient's condition that is critical or needs immediate attention and action²⁴. The **R** component in the SBAR stands for recommendations that enable medical personnel to contribute according to their knowledge and competencies in collaborating.

As the most influential domain found in the IPC approach is the communication domain, it also holds the biggest obstacles. Obstacles that are found include differences in language or terms used by doctors and other health professionals. In addition, the difficulty in conducting good communication is influenced by the existing low self-esteem of other health professionals when facing doctors, which is a negative impact from a long-established hierarchical culture in medicine. The limited service hours and the limited numbers of medical personnel are also obstacles in the communication domain. Challenges in communication can create difficulties in performing collaboration, such as difficulty to convey messages or easily arise misunderstandings. Under these circumstances, medical personnel can fail to perform their roles and responsibilities properly. Therefore, effective and clear communication is one of the many characteristics of an effective IPC team. Through communication, different professions will have the opportunity to understand each other's roles, they can synchronize perceptions about the goals and values of the provided health services and consistently introducing the SOPs of each profession so the authority and competence of each profession are well understood. The results of Reeves and Lewin's research show that different perspectives from medical personnel can influence the collaboration among doctors and other professionals negatively. Thus,

all the different SOPs from each profession need to be considered for better integration between patient care and communication among health professions²⁵. Some of these problems are expected to be resolved by increasing the quantity of informal communication aside from handling any cases. It is hoped that regular informal conversations will build better relationships among medical personnel, hence increasing a better understanding. Also, conducting regular meetings to discuss any specific cases will provide a better understanding of the roles, responsibilities, abilities and competencies, as well as specific terms that are frequently used by other medical personnel²⁶. In line with this approach, a continuous education about IPC for all health professionals is well needed. It is necessary to strengthen the daily practice of IPC with the main goal to increase the quality of patient care with measurable indicators such as patient safety²⁷.

Further exploration of this IPC implementation showed that in the domain of roles and responsibilities that there was a balanced distribution of responsibilities between each medical profession involved under their professions. This is one of IPC characteristics where all medical personnel are considered equal partners which allows all professions involved to contribute to the improvement of the patient's condition (patient outcome). The doctor continues to carry out her duty and responsibility in history taking and physical examinations, where she will request laboratory examinations as needed, establishing diagnoses and prescribing drugs for the patient. The clinical laboratory assistant uses her ability and competence to carry out the skin-scraping lab exam requested by the doctor. The results do not immediately translate into a diagnosis but are returned to the doctor's authority in establishing the diagnosis. Pharmacists prepare the drug receipts prescribed by doctors and provide education about drug dosages and how to apply Permethrin cream to patient's lesions, as well as the side effects that may occur. The education provided by pharmacists is limited to only about drugs. The education and information on personal and environmental hygiene and how to prevent scabies manifestation and its reinfestation are performed by the nurse who was appointed by the doctor.

This roles and responsibility domain affects the teamwork domain positively. The major effect is a collaborative interaction where each member of the IPC team can collaborate their respective knowledge and expertise to improve health services for the patients²⁸. The availability of SOPs or written guidelines will make it easier for health professionals to work in a team because every profession understands the roles and responsibilities and boundaries of the other professions. This will encourage the culture that supports the implementation of collaboration²⁹. Therefore, in addition to increasing communication skills and fostering appropriate attitudes and traits between personnel, a clear understanding of the roles and responsibilities of each profession in implementing IPC is needed. One profession needs to be introduced to other's roles and responsibilities as early as possible to avoid later misunderstandings in collaboration³⁰. Regular meetings, detailed medical records

and general SOPs for implementing IPC are urgently needed. Likewise, the confirmation of the roles and responsibilities as well as the competence of each profession must be socialized to see which ones are replaceable and which ones are not when providing care for the benefit of the patients³¹.

2. IMPACT OF IPC ON THE ASSESSMENT OF SCABIES REINFESTATION.

The IPC approach in cases of scabies reinfestation has a positive impact on the patient and the medical personnel. The patient receives comprehensive care that helps the healing process and prevents further reinfestations. This is as found in a literature review by the Canadian Health Systems Research Foundation which showed supporting evidence that patient health improves when care is provided collaboratively³². High levels of patient satisfaction are associated with patient-centered care, in which the patient feels being more involved in a discussion about their

health³³. Patients are often more satisfied with health care services that are delivered to meet their preferences. It is also known as a Shared Decision Making (SDM), a process where health care providers involve patients more actively as partners in decision-making, incorporating both medical evidence and individual patient priorities and preferences. This will result in a less anxious, quicker recovery and increased compliance with treatment regimes³⁴.

The immediate impact felt by healthcare professionals who are engaged in collaboration is a feeling of happiness of being useful. This is consistent with the findings of Bosch et al. in their research that showed that there is an increase in patient satisfaction with provided care and also job satisfaction of medical personnel as a result of implementing IPC. Job satisfaction is obtained from a feeling of being useful in contributing to the teamwork to improve patient's health. This will further serve as a source of motivation for improving the performance of each profession involved both as an individual and as a team³⁵.

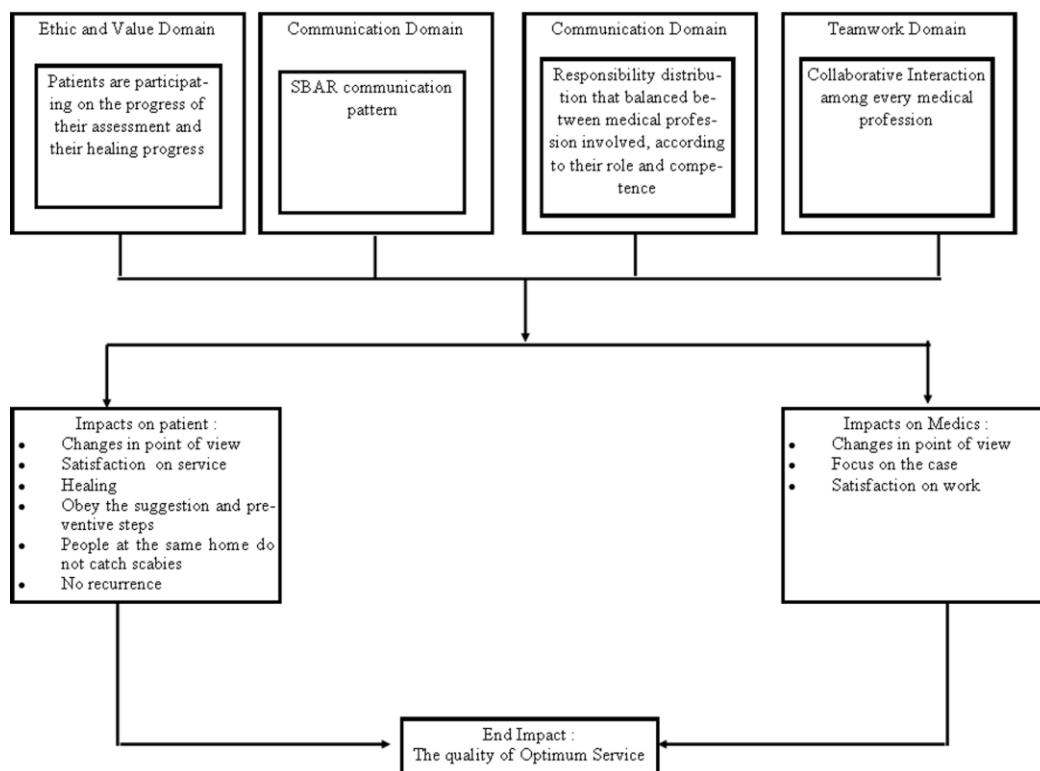


Figure 4. Themes of IPC impacts on scabies reinfestation management.

3. ACTION PLAN

The IPC approach in the case of scabies needs an SOP in any health center where it is demonstrated. It will hopefully ensure the effectiveness of performing each of the domains of IPC in managing scabies. It also requires collaboration with many parties, especially *Puskesmas* (Government Health Center) in areas where scabies is endemic. This is necessary to take preventive steps such as counseling and public health campaigns, as well as curative actions such as mass scabies medication. Prevention and treatment of scabies can be done on a person-to-person basis but it has low effectiveness in preventing the transmission of scabies

and its reinfestation on a large scale. A collaboration involving many parties is needed to perform communal interventions in the form of mass scabies treatments which results in a decrease in the number of scabies manifestation and its reinfestations³⁶.

CONCLUSIONS

Interprofessional collaboration as an approach in the management of scabies reinfestation case has a positive impact on patients and the involved medical personnel, resulting in optimal service quality. Further research with the same topic is expected to be conducted with more research subjects involving both private and government

health facilities in a designated area. Quantitative research is important to analyze the relationship between the domains of interprofessional collaboration with the success of scabies management.

REFERENCES

- Chandler DJ, Fuller LC. A review of scabies: an infestation more than skin deep. *Dermatology*. 2019;235(2):79-90.
- Vos T, Barber RM, Bell B, Bertozzi-Villa A, Biryukov S, Bolliger I, et al. Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *The Lancet*. 2015;386(9995):743-800.
- Zhang W, Zhang Y, Luo L, Huang W, Shen X, Dong X, et al. Trends in prevalence and incidence of scabies from 1990 to 2017: findings from the Global Burden of Disease Study 2017. *Emerging Microbes & Infections*. 2020;9(1):813-6.
- Azizah IN, Setiyowati W. The relationship between the level of knowledge of scavenger mothers about personal hygiene with the incidence of scabies in toddlers in the Semarang city final disposal site. *Dinamika Kebidanan*. 2011;1:1-5.
- Central Bureau of Statistics, East Nusa Tenggara Province. Ende District health profile 2015. Central Bureau of Statistics, East Nusa Tenggara Province; 2015.
- Gidha F. Medical record data of Lio Sehat Medical Center in 2019. Lio Sehat Medical Center. 2019;1:3.
- Thornley S, Marshall R, Jarrett P, Sundborn G, Reynolds E, Schofield G. Scabies is strongly associated with acute rheumatic fever in a cohort study of Auckland children. *Journal of Paediatrics and Child Health*. 2018;54(6):625-32.
- Hofstraat K, van Brakel WH. Social stigma towards neglected tropical diseases: a systematic review. *International Health*. 2016;8(suppl_1):i53-70.
- Gilson RL, Crane JS. Scabies. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 [Updated 2020 Aug 8]. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK544306/>
- World Health Organization. Framework for Action on Interprofessional Education and Collaborative Practice. Geneva: WHO Press; 2010.
- Lemieux-Charles L, McGuire WL. What do we know about health care team effectiveness?: a review of the literature. *Medical Care Research and Review*. 2006;63(3):263-300.
- Malone D, Marriott SV, Newton-Howes G, Simmonds S, Tyrer P. Community mental health teams (CMHTs) for people with severe mental illnesses and disordered personality. *Cochrane Database of Systematic Reviews*. 2007. doi:10.1002/14651858. CD000270.pub2.
- Simmonds S, Coid J, Joseph P, Marriott S. Community mental health team management in severe mental illness: a systematic review. *The British Journal of Psychiatry*. 2001 Jun;178(6):497-502
- Holland R, Battersby J, Harvey I, Lenaghan E, Smith J, Hay L. Systematic review of multidisciplinary interventions in heart failure. *Heart*. 2005;91(7):899-906.
- McAlister FA, Stewart S, Ferrua S, McMurray JJ. Multidisciplinary strategies for the management of heart failure patients at high risk for admission: a systematic review of randomized trials. *Journal of the American College of Cardiology*. 2004;44(4):810-9.
- Naylor CJ, Griffiths RD, Fernandez RS. Does a multidisciplinary total parenteral nutrition team improve patient outcomes?: a systematic review. *Journal of Parenteral and Enteral Nutrition*. 2004;28(4):251-8.
- Creswell JW. Research design: qualitative, quantitative, and mixed methods approaches. Yogyakarta: Pustaka Pelajar. 2016:5.
- Djuanda A, Hamzah M, Aisah S. Science of skin and venereal disease. *Repositori Riset Kesehatan Nasional*. 2010:137-140.
- Walton SF, Currie BJ. Problems in diagnosing scabies, a global disease in human and animal populations. *Clinical Microbiology Reviews*. 2007;20(2):268-79. doi:10.1128/CMR.00042-06.
- Chandler DJ, Fuller LC. A review of scabies: an infestation more than skin deep. *Dermatology*. 2019;235(2):79-90.
- Engelman D, Kiang K, Chosidow O, McCarthy J, Fuller C, Lammie P, et al. Toward the global control of human scabies: introducing the International Alliance for the Control of Scabies. *PLoS Negl Trop Dis*. 2013;7(8):e2167. doi: 10.1371/journal.pntd.0002167
- Mathieu J, Maynard MT, Rapp T, Gilson L. Team effectiveness 1997–2007: a review of recent advancements and a glimpse into the future. *J Air Waste Manag Assoc*. 2008;34(3):410–476.
- Soemantri D, Kambey DR, Yusra RY, Timor AB, Khairani CD, Setyorini D, et al. The supporting and inhibiting factors of interprofessional collaborative practice in a newly established teaching hospital. *Journal of Interprofessional Education & Practice*. 2019;15:149-56.
- Panel IE. Core competencies for interprofessional collaborative practice: report of an expert panel. Washington DC: Interprofessional Education Collaborative Expert Panel; 2011.
- van Dongen JJ, de Wit M, Smeets HW, Stoffers E, van Bokhoven MA, Daniëls R. “They are talking about me, but not with me”: a focus group study to explore the patient perspective on interprofessional team meetings in primary care. *The Patient-Patient-Centered Outcomes Research*. 2017;10(4):429-38. doi:10.1007/s40271-017-0214-3.
- Fitria CN. The effectiveness of SBAR communication training in improving the motivation and psychomotor of nurses in the medical surgery room at PKU Muhammadiyah Hospital Surakarta. *Pros Semin Nas Int*. 2017.
- Reeves S. Using the sociological imagination to explore the nature of interprofessional interactions and relations. In: Kitto S, Chesters J, Thistlethwaite J, Reeves S, eds. *Sociology of Interprofessional Health Care Practice: Critical Reflections and Concrete Solutions*. New York: Nova Science Publishers Inc; 2011:9–22.
- Barrett J, Curran V, Glynn L, Godwin M. CHSRF synthesis: interprofessional collaboration and quality primary healthcare. Ottawa: Canadian Health Services Research Foundation; 2007.
- Whitehead C. The doctor dilemma in interprofessional education and care: how and why will physician collaborate?. *Med Educ*. 2007;41(10):1010–1016.
- Khalili H, Hall J, DeLuca S. Historical analysis of professionalism in western societies: implications for interprofessional education and collaborative practice. *Journal of Interprofessional Care*. 2014;28(2):92-7.
- Setiadi AP, Wibowo Y, Herawati F, Irawati S, Setiawan E, Presley B, et al. Factors contributing to interprofessional collaboration in Indonesian health centres: a focus group study. *Journal of Interprofessional Education & Practice*. 2017;8:69-74.
- Reeves S. An overview of continuing interprofessional education. *J Continuing Educ Health Prof*. 2009;29(3):142–146.
- Brault I, Kilpatrick K, D'Amour D, Contandriopoulos D, Chouinard V, Dubois CA, et al. Role clarification processes for better integration of nurse practitioners into primary healthcare teams: a multiple-case study. *Nurs Res Pract*. 2014:170514.
- Hirpa M, Woreta T, Addis H, Kebede S. What matters to patients?: a timely question for value-based care. *PLoS ONE*. 2020;15(7):e0227845. doi: 10.1371/journal.pone.0227845. PMID: 32644993; PMCID: PMC7347201.
- Supper I, Catala O, Lustman M, Chemla C, Bourgueil Y, Létrilliart L. Interprofessional collaboration in primary health care: a review of facilitators and barriers perceived by involved actors. *J Public Heal (United Kingdom)*. 2015;37(4):716-27.
- Peduzzi M, Agreli HF. Teamwork and collaborative practice in primary health care. *Interface-Comunicação, Saúde, Educação*. 2018;22:1525-34.