PREGLED LITERATURE - REVIEW ARTICLE

Influence of team diversity on team effectiveness: importance of public health

Uticaj diverziteta tima na njegovu efikasnost: značaj za javno zdravlje

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Summary

Work group diversity, the degree to which there are differences between group members, may affect group process and performance positively, as well as negatively. Research on the relationship between work –group diversity and work- group effectiveness has yielded inconsistent results in many disciplines, as well as in medical science. To address this problem, the authors examined different perspectives on work-group diversity and work-group effectiveness within the health care system. We reviewed the PubMed literature on work-group diversity and its effectiveness to assess the current state and to identify key issues for future research. This review points to the need for more complex conceptualizations of diversity and effectiveness in the work-group environment in the health care system, as well as the need for more empirical attention to the processes that are assumed to underlie the effects of diversity on group process and performance and the contingency factors of these processes.

Key words: work-group, diversity, effectiveness, health care

Sažetak

Diverzitet radnog tima, kao i stepen različitosti članova tima mogu uticati na radni proces i performanse, pozitivno, kao i negativno. Istraživanja koja su se bavila ispitivanjem uticaja diverziteta grupe na efikasnost rada tima dala su oprečne rezultate u mnogim disciplinama, pa i u medicini. Cilj ovog rada je analiza perspektive diverziteta i efikasnosti radnog tima koji deluje u zdravstvenom sistemu. Sagledali smo relevantnu literature na ovu temu na PUBMed bazi podataka kako bi sagledali aktuelno stanje i identifikovali ključni pravci za naredna istraživanja. Ovaj prikaz ukazuje na potrebu kompleksnije konceptualizacije diverziteta radne grupe kako bi se postigao efikasniji rad u zdravstvenom sistemu, kao i na veće empirijske pažnje na procese koji utiču an diverzitet i karakteristike tima, kao i na nepredvidjene faktore u procesu.

Ključne reči: efikasnost, diverzitet, tim, javno zdravlje

Introduction

Todays' health care professionals need a variety of case management skills and abilities to reach their activities in the community (1,2). It is specifically important for the countries in transition (3). Each health care system is specific to each country, and therefore involves different motivation and job satisfaction factors (4). A crucial issue in the public health sector is that of professional development for a workforce in the context of change - change both within public health itself and in the setting in which it operates. New approaches to intervention, emerging problems and new ways of organizing services present challenges that, more than ever, demand updating practitioners' and managers' skills (5,6). Health care workers in modern health facilities need to be supported by their leaders to develop clinical and preventive activities and to strengthen professional competencies (7,8).

Whenever something needs to be done in teams, one must be aware that they bring together a diverse set of personalities, personal backgrounds, experiences, cultural perspectives, and work styles. In current public health practice, there are many opportunities of working in quite diversified groups, which reflect sometimes positively, but at times also negatively on the work and result in different outcomes - from very pleasing to rather disappointing. The authors are interested in the effect diversification has ongroup effectiveness, thus they wrote this paper reflecting on the relationship between the work-group diversity and work-group effectiveness.

Material and Methods

We reviewed the PubMed literature on workgroup diversity and its effectiveness to assess the current state and to identify key issues for future research regarding the itemsimportant for a health care system.

Results and Discussion

In the article written by Knouse and Dansby (9), the researchers consider other existing theoretical papers on advantages and disadvantages of diversity (e.g. gender, minorities, people with disabilities) in work groups and build on this body of knowledge by proposing that the effects (positive or negative) that arise from the diversity in teams actually depend on the percentage of diversity. Based on the measures taken from the Military Equal Opportunity Climate Survey Test Version 3.1 (27) - commitment, overall effectiveness, satisfaction, cohesion, trust, equal opportunity climate, and quality affect the performance and the outcome of the group. The results of the study showed the optimal amount of diversity - the highest effectiveness occurred in those groups with 11-30% diversity and it declined with higher levels of diversity. According to previous investigations, there is the need for more complex conceptualizations of diversity, as well asthe need for more empirical attention to the processes that are assumed to underlie the effects of diversity on group process and performance and the contingency factors of these processes (10). One team can benefit from the diversity that is within these limits by having a wider pool of ideas, experiences, and capabilities to offer when solving a problem. Once diversity goes beyond this level, perception of group effectiveness starts to decline and there is an increased potential for tension and conflict. These findings generally support the concepts previously identified in the literature that encourage a small proportion of diversity in work groups.

Finally, Knouse and Dansby (9) discuss team development and management of diverse work groups and also suggest further expansion of the results by adding other dimensions of diversity that were not taken into account by themselves, but might increase the relevance of the article and provide more implications for further actions and diversity management. This article is very understandable because all the parts were explained guite clearly - the method of gathering the information, the results that this method delivered and the discussion at the end. This all helped us understand the importance of the results as well as their interconnection. The analyzed paper was very concentrated on the subject - it is not too extensive, so one can easily follow the line of thinking from the beginning until the end and bear in mind the ultimate research question: the correlation between the percentage of diversity and the effectiveness. The article reflected on many other sources and was based on existing theoretical work, but also provided some new research and results, as well as implications for managing diversified work groups. One of the other dimensions of diversity are the cultural differences and the difference in the educational characteristics of the people working at the same level. As a result of our experience, those dimensions are very important and potentially have even more influence than for example the gender of the group members. This effects greatly how individuals understand each other and look at

each other, as well as how they relate to the group. The barriers to health care professional success was primarily financial and educational; and most public health programs are designed to ensure culturally competent and sensitive graduates (11). Very often, when there is educational diversity in one work group, this leads to the creation of subgroups. Furthermore, this reduces the cohesion of the group and has a negative effect on the effectiveness at least as much as the other diversity dimensions.

Like we have already mentioned, even though it builds on previous theoretical work from other researchers and existing literature, reviewed articles are rather practically oriented and use the theory mostly to give an overall introduction to the topic and explain the background of the research question. Due to globalization, continuous pressure on the pharmaceutical companies and health care facilities to be innovative and different than the others, and overall continuous structural changes of the personnel, the diversity in the workplace is constantly increasing and so is the importance that is put on it (12). But it is not enough for an organization to have a diverse employee population, it must as well be able to manage their differences in order to reach the best possible outcome and improve its effectiveness. Everyone who has ever worked in a team knows that this way of working always has its advantages and disadvantages. Diverse employees bring in individual talents and experiences when suggesting new ideas or when they deal with challenging situations, which increases the institution's adaptability to the fluctuating markets and various patients and their relative demands. An organization can, in this case, supply a greater variety of solutions to problems in service, sourcing and allocation of resources, as well as provide services to customers on a global basis, which is nowadays very important, as was already mentioned above. Therefore, in today's fast-moving world, bringing together different people, their collaboration and coming up with solutions and ideas is crucial for the organizational development. On the other hand, as good as it sounds to have more opinions to contribute, varying methods to solving problems and broader viewpoints to analyze decisions can sometimes be a big disadvantage and very challenging to deal with. There are some operations where having less diversity results in less time necessary to complete the tasks and in this case it might be easier to organize the group members, like some routine tasks, where diversity and higher amount of opinions, background experiences and organizational preferences only lead to low quality output and ineffectiveness. Even when it comes to some non-routine tasks, if the differences between the group members are so big, this could result in disagreements and chaos as well as inability to attain the original purpose of the group work. Therefore, it can be said that what determines the effectiveness of the group is not only the qualities of the individual members, but even more so how the group chooses to use its resources and how it focuses its attention. It is the management of this diversity that determines the outcome rather than the diversity itself. Some papers contribute to the implications

for diversity management by suggesting the optimal level of diversity for achieving higher effectiveness.

We consider the topic of team diversity very important, due to the amount of group work we have done in clinical practice and the amount of it that we will probably be doing in the future. It is always useful to know what the theory states on this matter and what the research shows in order to improve the practical experience. When reading about the optimal amount of diversity in a work group, one of the things that sparked our interest and further thinking was whether this research is to be used by applying the recommendations it delivered, or by concentrating on the reasons for the amount of optimal diversity to be this high and trying to find ways of managing diversity so that even with a higher percentage of it the possibility of sustaining or increasing the effectiveness would still exist. Not always is it possible to affect the level of diversity in the work group. The problems that we have most commonly come across. where the lack of understanding between the individual group members and high amount of misinterpretation for many reasons, one of the most present ones being the language differences (even the different level of language knowledge can often result in miscommunication) and the differences in values and lifestyles. Dealing with them truly requires investing time, a lot of effort and conscious thought in order to first of all understand diversity in order to be able to manage it efficiently afterwards. Under diversity we consider not only gender, nationality or disability, but a much wider spectrum of differentiation - age, gender, nationality, personal and work background and experience, education, personality, lifestyle, physical ability, native language, values, world views, and whatever else might be of importance and influence when dealing with other individuals who are members of the same group. It has a great effect on the outcome when all the differences are valued and a climate is cultivated where the differences between people are appreciated rather than judged and where everyone is encouraged to be conscious of these differences and responsive to a wide range of them in a positive way. If the diversity within the project team is acknowledged and responded to, this allows every member to be perceived as an equal in the group and have the maximum opportunity to contribute to the work that needs to be done. On the other hand this avoids tension and conflicts and makes the support and managing of this diversity much easier for those who are in charge. At the same time, it enables all members of the team to achieve their full potential, which ultimately leads to more effectiveness in relation to the group task. This is unfortunately not the norm, and people in diverse groups usually don't get along as well as people in non-diverse groups, which coincides with the findings of the article that groups with the diversity percentage of 11 to 30 percent (which we consider rather low) show highest effectiveness. Thomas (13) also researched the relation between cultural diversity and work-group effectiveness and in his experimental study culturally homogenous groups have had higher performance results than the heterogeneous groups did. Also according to Stanford (14), we assume that the people who "look like us think like us" but that is actually not always the case. The fact that someone is the same race or the same gender like us does not necessarily mean that this person actually has the same beliefs and opinions as us. Of course, this also works the other way round. We have a natural tendency to categorize things, especially with those things that are new and unfamiliar to us, because this helps us deal with the unknown. This is exactly where the problem arises, because right at the beginning of dealing with other individuals it is in our nature to divide into us and once we notice or even more so assume the potential differences. Our experience is that no matter how much we talk about the bad sides of stereotyping and prejudice, we are still all prone to them. It is easier for us to simplify things by categorizing even though in practice, taking a little bit of time and being open enough to get to know the person one is working with always shows better results. By learning about someone's background and who this other person truly is, as well as sharing who we are, helps us understand his or her needs as well as qualities. The more we find out about someone and the more we understand them, the easier and more effective it gets to work together as a group. Due to this experience we indicate that an open, direct but diplomatic relationship among the group members is very important. Curiosity about others should be welcomed, as it helps integrate the group better and reduce the possibility of misunderstandings and misinterpretations. This is all of such importance because if a member of the group feels that his or her personal characteristics are not valued enough, then they can not contribute to the group work in the amount that they normally would. From the point of view of the rest of the group, this tendency to include or exclude other members of the team is most often automatic. Because of that, it is not so easy to change our acting habits since it takes time. effort, and much thought. Therefore in our experience of working in groups, due to all the above listed reasons, there certainly is a limit of diversity under which a group can operate most effectively and avoid tensions, conflicts and misunderstandings.

Not many dimensions of diversity were mentioned in the articles and we feel that there are limitless criteria and dimensions of researching on diversity. Brewster (15) introduces a telescope analogy when writing about diversity and levels of human resource management: if we observe something through a telescope we can notice certain similarities between a group of things, but with each further turn of the screw things that seemed similar are brought into sharper focus so we notice new differences between them and therefore group them differently. For example, if we first observe nature and distinguish between the forest and the trees, with another turn we can distinguish between one tree and another and then between one tree and another. Each of the views is accurate, each of them blurs some objects and clarifies others, each helps us to see some similarities and some differences. With so many diversity dimensions, the one that should be taken into consideration when forming work-groups is the one that really might affect the working process. For example, differences in cultural backgrounds might affect decision process when developing some organizational policies but not when completing routine tasks (!5,16). On the other hand, the situation might be just the opposite if the diversity dimension considered would be physical disability. This is also taken into account by Brewster (17), who argues that no level of diversity is necessarily correct or more inductive than the others, but the levels need to be specified to make the analysis more meaningful. Therefore, the level of analysis will depend upon the question being asked. But where the true complexity comes in is when researching and analyzing more than one level at the time. Unfortunately, this problem is too often resolved by ignoring it.

Group characteristics such as purpose, modality, size, and member incentives are shown to influence the likely optimal group structure for varying tasks. Open group work allows rapid communication and interactive feedback as well as the emergence of a collective intelligence above that of the individual members. However, productivity may be limited by large open group size and the multiple dyads of communication, limiting cognitive diversity, and human resource capital. Furthermore, group-level biases and bias may be introduced within the group. Little quantitative work on these issues has been conducted in the epidemiologic work setting, but recent experimental research in other areas of science and management indicates that structured protocols to support dynamic group work can improve group decisions. The merit of often highly accurate group aggregate approaches, with parallel independent individual inputs such as crowd sourcing is becoming increasingly recognized (18). Some investigators explores the link between a team's gender diversity and its performance (19), as well as cultural competence (20, 21).

In many countries, health care professionals are trained predominantly in uniprofessional interprofessional independent of education collaboration (22-24). Yet, these professionals are tasked to work collaboratively as part of an interprofessional team in the practice environment to provide comprehensive care to complex patient populations. Each member of the interprofessional team brings discipline-specific expertise, allowing for a diverse team to attend to the multidimensional health needs of individual patients. The interprofessional team must organize around a common goal and work collaboratively to optimize patient outcomes. Successful interdisciplinary endeavors must address issues related to role clarity and skills regarding teamwork, communication, and conflict resolution (25). Judicious choice of methods for bringing people together, and supporting their debate and decisions, depends upon the drivers of those involved; these vary with their characteristics, particularly their degree of enthusiasm and experience, and their motivation (26). The framework consists of three key interrelated dimensions: the drivers for involvement; the processes for involvement, and the impact of involvement. .

To conclude, most reviewed articles are very practically oriented and offer very interesting implications for which can be considered guite significant. They look back on previous findings to develop a research question and use a well-explained research method to deliver its own findings. We would be very interested in finding further literature from foreign environments that consider even more dimensions of diversity. Here we refer to cultural background more than any other dimension, because we think that it has a crucial effect on our behavior. Only after increasing the amount of diversity dimensions, can the complexity of the topic really be made clear. On the other hand, there is a risk that the implications of the article lose on significance, since a very high amount of possible subgroups would arise and the findings might be too complicated to sum up, understand and even use efficiently. Anyway, the key when dealing with diversity is the acknowledgment and exploration of the differences among the individual group members. This would improve their mutual understanding and reduce the possibility of miscommunication, tension, or conflicts and make even more sense than consciously limiting the diversity in a work

Conclusion

Health care managers should reconsiderwork-group diversity and work-group effectiveness in their organization, especially to improve the quantity and quality of service. The present study suggests the positive roles of education and quality control work group to improve clinical and preventive practices, but additional studies are needed.

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