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Primary Care Physicians

Health Care Plan Selection

} Highlights }

Perceptions of Healthcare

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Health Care Plan Selection: Medicare Beneficiaries and the Different Factors Taken into Consideration

By Michael Castro, D.B.A.

Abstract- The purpose of this paper was to obtain an enhanced understanding on the main factors that Medicare beneficiaries take into consideration before selecting a plan. This objective was fulfilled by interviewing a total of 16 Medicare beneficiaries from two south Florida counties. The participants were divided equally, 8 participants from Miami- Dade County and another 8 from Broward County. The researcher evaluated the differences between the populations from Miami-Dade County and Broward County participants to determine if there were any similarities. The researcher utilized one research question in order to fulfill the objective of the paper. By comparing the responses from the participants from both counties, health care plans that serve both counties can gain understanding of the differences between the populations.

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I. WHAT ARE THE DIFFERENT FACTORS THAT MEDICARE BENEFICIARIES TAKE INTO ACCOUNT WHEN SELECTING A MEDICARE PLAN?

The Medicare beneficiaries in South Florida value and demand different benefits within the health care plan (in which they are enrolled) depending on their health status. The Medicare beneficiaries in Broward County and Miami-Dade County are in need of benefits that these health care plans offer. There are several benefits that the senior population may highly value, such as hospital coverage, prescription drug coverage, primary dental benefits, vision benefits, transportation benefits, and over-the-counter (OTC) benefits. Health care plans that lack certain benefits lead to members to dis-enroll from the health care plan when open enrollment begins (Mobley et al., 2007).

II. MEDICARE PLAN SELECTION FACTORS AMONG BROWARD COUNTY MEDICARE BENEFICIARIES

Broward participants valued dental, vision, prescription drug coverage, and their primary care physician. Five of the eight participants from Broward County (4 males and 1 female) had changed plans due to a lack of dental, vision, prescription drug coverage, and/or because their primary care physician was no longer contracted to practice as part of the plan. These

five Broward County participants believed that their dental, vision, prescription drug coverage, and primary care physician were most important. These results suggest that male Medicare beneficiaries in Broward County pursue these benefits at a higher rate compared to the female Medicare beneficiaries. The other three participants, who had not changed plans, did not consider these benefits as important.

III. MEDICARE PLAN SELECTION FACTORS AMONG MIAMI-DADE COUNTY MEDICARE BENEFICIARIES

Five of the eight participants from Miami-Dade County (3 females and 2 males) had also changed health care plans. These Medicare beneficiaries changed health care plans due to a lack in prescription drug coverage/copays and because their primary care physician was no longer contracted to practice under the Plan. These results suggested that females in Miami-Dade County expect their health care plans to provide such benefits, in contrast to their male counterparts. The Miami-Dade County beneficiaries also valued prescription drug coverage and the copays to those drugs, as well as their primary care physician the most. If a health care plan did not offer such benefits, the Medicare beneficiaries would change plans and pursue a plan that provides such benefits. The other three participants changed health care plans for other reasons.

IV. COMPARISON OF MEDICARE PLAN SELECTION FACTORS BETWEEN BROWARD COUNTY AND MIAMI-DADE COUNTY MEDICARE BENEFICIARIES

Both samples of Medicare beneficiaries revealed similarities and differences in the various factors they evaluate before enrolling into a health care plan. Differences were as follows. The Broward population valued dental, vision, prescription drug coverage, and their primary care physician the most. The Miami-Dade population valued prescription drug coverage/high copays and their primary care physician the most. Males in Broward County would change health care providers if the plan did not offer dental, vision,

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prescription drug coverage, or their primary care physician. Females in Miami-Dade County changed health care providers if the plan excluded prescription drug coverage, included high copays and/or if their primary care physician was no longer contracted to practice under the Plan.

Both samples reported similarities as well. Miami-Dade County participants and Broward County participants both valued prescription drug coverage and their primary care physician contracted under their health care plan. The researcher also determined that the older the participants were, the more they valued prescription drug coverage and the copays certain medications had. The younger participants from both counties did not focus as much on prescription drug coverage and the copays they might have to pay for a certain medication. Rather, the younger beneficiaries were more concerned with the primary care physician they were visiting on a regular basis. The older beneficiaries consumed a larger amount of medications on a daily basis compared to the younger participants in both counties.

Both samples also believed that their primary care physician was an important factor when selecting a health care plan. Neither the participant's gender nor age seemed to have an impact on their decision.

V. SUMMARY OF FACTORS CONSIDERED WHEN SELECTING A MEDICARE PLAN AMONG BROWARD COUNTY AND MIAMI-DADE COUNTY SAMPLES

Overall, the researcher determined that the Miami-Dade and Broward County participants had similar responses. However, there were two main conclusions. One main conclusion was that the top factors that beneficiaries took into consideration when selecting a Medicare plan was prescription drug coverage and the primary care physician they were assigned to. The Broward beneficiaries valued dental, vision, prescription drug coverage and their primary care physician the most. On the other hand, Miami-Dade beneficiaries valued prescription drug coverage/high copays and their primary care physician the most.

The other main conclusion was that age played a role in the selection of the Medicare plan. The minimum age of the participants was 65 years of age. The oldest participant was 81 years old. The youngest was 66 years old. The older the participant, the more he or she valued prescription drug coverage. Older beneficiaries valued prescription drug coverage because they consumed a larger amount of medications on a daily basis, compared to the younger beneficiaries.

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Interprofessional Working: Perceptions of Healthcare Professionals in Nepalese Hospitals

By Bachchu Kailash Kaini, Ulke Veersma & Linda Burke

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Abstract- Interprofessional working (IPW) is an essential part of the health service delivery system. Effective delivery of health services relies on the contribution of healthcare professionals (HCPs) from all groups. The aim of the study is to examine how HCPs collaborate and to assess their perceptions of IPW on healthcare delivery. This study follows a qualitative research approach. It was conducted in three hospitals in Nepal using semi-structured interview schedule. Purposive sampling method was used to select the hospitals and the participants. All together thirty-eight HCPs participated in the research. This study suggests that IPW is an integral part of HCPs' life and they viewed it as a booster to support them to deliver the optimal and desired health outcomes. HCPs perceived that organisational support and involvement of service users are important for the successful delivery IPW. Verbal means of communication are mostly used during IPW. Nursing and allied health professionals (AHPs) are more critical to the medical professionals because they feel domination and professional isolation from the medical professionals. This study recognises factors that support IPW and also identifies various barriers to IPW in Nepalese hospitals.

Keywords: *interprofessional working, healthcare professionals, perceptions, medical dominance.*

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Bachchu Kailash Kaini ^α, Ulke Veersma ^σ & Linda Burke ^ρ

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1. INTRODUCTION

Various HCPs and organisations contribute to health and social care. Every profession and healthcare organisation has its own purpose, interest and field of specialisation. Healthcare system across the world 'depends on health workers working together across professional groups and system boundaries' (Mickan et al., 2010, p.493). The structure and nature of healthcare team is varied and it depends on various factors such as types of service users, specialties, organisational strategies, and so on. The way interprofessional care (IPC) team is managed and structured may have great impact upon the success or failure of the team. The main objective of IPW is to bring a broader scope of knowledge, skill and expertise of HCPs in the efforts to improve the quality of care and clinical outcomes related to health problems and issues of service users (Bope and Jost, 1994).

Empirical researches have demonstrated that more positive healthcare outcomes are achieved by collaborating interprofessional teams (Pollard et al,

2005; Dow and Evans, 2005; Ritter, 1983; Biggs, 1997; Miller et al, 2001; Leathard, 2003; CHSRF, 2006; Byrnes et al, 2009; Holland et al, 2005; McAlister et al, 2004). These researches were carried out on IPW in developed health economies. However, it is observed that there were no comprehensive researches carried out and reported in underdeveloped countries to investigate the benefits of IPW and collaborative practice to service users and to assess the perceptions of IPW among HCPs. This study was designed to answer three research questions: (1) how do various HCPs interact and collaborate in Nepalese hospitals? (2) how do HCPs perceive the impact of IPW within teams on the delivery of healthcare? (3) which factors support and hinder IPW between various professionals in teams providing healthcare services?

Nepal is a small landlocked and underdeveloped country situated in South East Asia between India and China. There is a multi-tier health delivery system in Nepal based on the different levels of care - tertiary, secondary and primary care. Health services within the public sector are centrally financed in Nepal with differing degrees of local autonomy and the control of service delivery rests largely in the hands of the relevant professions. Apart from government healthcare facilities, number of private hospitals, nursing homes, medical colleges and voluntary hospitals (hospitals run by charitable or not-for-the profit organisations) are established in Nepal. Public and private educational institutions run various academic and vocational healthcare courses in Nepal at undergraduate and post graduate levels. Professional councils regulate healthcare professionals and all HCPs are required to register with their respective council to be a qualified member of their profession and to practice legally in Nepal.

The health service in Nepal is the biggest employer group and it has more than 50 careers, most of which are qualified, registered or regulated professionals (MOHP, 2012). With such a diversity of professions, it is obvious that co-ordinated patient care requires communication, interaction and joint decision making between HCPs (Reel and Hutchings, 2007, p.138). In this context, this study was carried out to assess how HCPs collaborate and to assess their perceptions of IPW on healthcare delivery in Nepal.

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II. METHODS

This research is carried out by using qualitative method and by employing a case study approach. This study mainly focuses on assessing the participants' own experiences and understanding of the subject they are involved in or have experienced. Therefore, qualitative approach is considered as a more appropriate approach.

The 'healthcare professional' is a broad term which covers all professionals working in the health services. Based on the nature of their work, identity, registration requirements with professional councils, established norms and practices; in this study the HCPs were divided into three groups – medical, nursing and AHPs. Data for this study is collected by using semi-structured interview schedule from these three groups of HCPs from three hospitals in Kathmandu, the capital city of Nepal. AHPs include all professionals (excluding medical and nursing) such as- physiotherapists, biomedical scientists, pharmacists, radiographers, pathology technicians, language and speech therapists, occupational therapists, etc.

a) Sampling and data collection

This study followed non-probability and purposive sampling and identified the cases of interest from people or organisations which were 'information rich' (Patton, 2002). Identifying and negotiating access to research sites, subjects and population are critical parts of the research process especially in qualitative research (Devers and Frankel, 2000). A list of hospitals in Kathmandu was searched and their capacity, nature of work and year of establishment was then compared. One hospital from each group of public, private and voluntary (not-for-the profit) hospital was selected for this study. There were three inclusion criteria for all participants for the study. Firstly, all participants should be professionally qualified. Secondly, the participants should be registered with their professional councils and should be eligible to practise in their healthcare or clinical field. Finally, all HCPs should be working with an IPC team.

A total of 38 HCPs participated from the three hospitals. Of the total participants, 13 were medical professionals, 15 were nursing professionals and 10 were AHPs. Similarly, 13 participants were from the public hospital, 14 were from the private hospital and 11 were from the voluntary hospital. All interviews were conducted in the hospital at the time and date of their choice. The duration of each interview was between approximately 45 minutes to an hour. All interviews were recorded in a digital format with the informed and written consent of the participants. The interviews were transcribed, saved in the digital format and were anonymised to protect confidentiality.

b) Data analysis

This study followed multiple case study approach for data analysis. Qualitative content analysis approach was followed for this study, which identified certain patterns and themes. Inductive approach; by grounding the assessment of categories, patterns and themes, and by drawing inferences; was followed. This study used interpretive thematic approach to analyse the interview data. A combination of paper, post-it divider, highlighters and coloured markers to mark hard copies of transcripts was used to interpret and analyse data. Apart from the data from the interviews, various other hospital documents and policies were also reviewed and analysed for this study.

c) Ethical considerations

Ethical approval was received from the University Research Ethics Committee, University of Greenwich and Nepal Health Research Council (a national regulatory body to oversee and regulate health researches in Nepal). Moreover, approval from three hospitals, where the study was carried out, was obtained.

III. RESULTS

The findings of the study are divided into various sections based on major themes and categories derived from the analysis of interview data and review of hospital procedural documents related to IPW. Interview quotes are presented by professions and hospitals, coded and anonymised (e.g. A1-N, B5-M, C8-A) to maintain confidentiality. First alphabets A, B and C represent the types of hospital (i.e. public, private and voluntary hospital respectively) participants belong to, whereas the last alphabets N, M and C represent nursing, medical and AHPs respectively.

a) Medical dominance

Nursing and AHPs from all hospitals perceived that medical professionals dominate overall service delivery aspects in healthcare and they perceived that it as detrimental for IPW relationships. They mentioned various reasons why the medical professionals dominate the healthcare sector. A nurse from the private hospital states:

Doctors are seen as the dominant profession in the hospital. There are many reasons for this; it is mainly because of their education and expertise. (B11-N)

Participants stated that medical professionals are seen as highly recognised, respected and competent compared to other professionals. They stated this was due to their education, expertise, high recognition of their professions from the public and other HCPs, and specialised roles. Few nursing and AHPs highlighted that medical professionals' degree and specialised knowledge put them on top of the

professional, organisational and team hierarchy in healthcare organisations and hospitals.

A nurse from the public hospital comments how medical professionals feel superior than other professionals:

Sometimes we try and suggest the doctors to carry out something for patient care, but they do not easily accept our suggestions and they feel we are doubting them or they feel they are superior than us. (A10-N)

One AHP from the private hospital highlights the need of equal recognition of all professionals:

Even though all professions have to be equally recognised and given equal importance, the doctors completely dominate our profession due to their attitude, social recognition and roles. (B6-A)

An AHP feels sidelined by medical professionals:

We have not been given the authority to produce report and our signature here is nearly invalid. We (AHPs) are seen as helpers by medical professions rather than a secular profession. Therefore, we always feel dominated. (C5-A)

Medical professionals agreed that dominance of medical professions exists in Nepalese hospitals. One medical professional stated that they get more respect than any other professionals and this may be one of the reasons why they seem more dominant amongst all professions in healthcare. He states:

I think the respect and recognition to a doctor is more than that is required and that's why doctors feel more proud and empowered than they should be at times. I think people are more esteemed than they should be. So, we are having more respect than we want. People think a doctor is the God which is not correct. (A2-M)

b) Organisational support and structures

Participants felt that the healthcare organisations defines roles of clinical leaders and delegates them authority to ensure safe and effective delivery of health services. Participants felt that organisational support was essential for the development of clinical leadership and for successful IPW. One nurse from the public hospital states:

I have seen my team leader, a medical professional, has resolved conflicts between two different professionals and driven the team for achieving common goals of our team. (A4-N)

Participants believed that the initiatives taken by a leader of IPC team helped to enhance skills and competency of HCPs. One AHP from the voluntary hospital states:

I feel my team in-charge (medical professional) takes necessary steps to facilitate IPW. He takes actions to

promote IPW across the hospital through team meetings, training, education and conferences. (C6-A)

All professionals from all hospitals stated that medical professionals lead the team and they felt that team leaders were competent and supportive. One nurse from the public hospital states:

For now the doctors lead the team. They support us and they are competent but there are still things to improve. (A1-N)

From the interviews, it is noted that there were no such ground rules, organisational policies or protocols for IPW. One medical professional pointed out that lack of organisational policies for IPW is not helpful for them to deliver IPC:

We have no practice to set up rules or policies for IPW to make sound and appropriate decisions for the delivery of IPC. This does not help to improve IPW relations. (A7-M)

One nurse from the private hospital stated that there were inconsistent approaches due to the lack of protocols for IPW. She states:

There are no written protocols for IPW in this hospital. The rules are used according to the situation. (B11-N)

One AHP from the voluntary hospital comments that there were no guidance or protocols for IPW at any levels. She adds:

I have never seen any guidance or protocols for IPW, not only in this hospital, but also in other hospitals, at national or regional levels. (C6-A)

From the analysis of hospital documents, strategies and policies of participating hospitals, it was noted that hospitals did not have protocols or guidance for IPW. During the research, job descriptions of ward managers, in-charges and department heads were reviewed. The job descriptions of healthcare did not have any components or roles specified for IPW or collaborative practice between HCPs.

c) Communication and interaction

Participants mentioned that they used different means of communication to communicate with service users and other professionals while they deliver health services. It is apparent from the interviews that most of the time HCPs used verbal means of communication. Participants mentioned face to face meetings or discussions, telephone conversations, continuous medical education (CME) and clinical conferences are widely used to communicate with other colleagues at work. One medical professional from the public hospital states that they conduct a medical conference every morning to communicate between all professional groups in the hospital:

There is a morning conference. That is one of the most important ways of communication. And, we

communicate about patient's health both formally and informally, I mean verbally and by phone. (A7-M)

One nursing professional from the private hospital experienced that the verbal means of communication is used mostly:

There are various means used for communication between the team members. For example, proper job description and tasks are studied and then jobs are assigned to the individuals. Mostly, verbal communication is carried out. (C11-N)

Participants from all hospitals stated that they used medical notes, documents or forms to note their clinical assessment, management, findings, observations and treatment plan apart from face to face meetings and verbal communication. One medical professional from the public hospital states:

We have a mechanism where the doctors write on the form or medical notes. That is a means of communication (A2-M)

d) *Involvement of service users*

All participants from all hospitals pointed out that service users' awareness of their problems and understanding from their perspectives are equally important to both sides – HCPs and service users for the successful delivery of IPC. One nurse from the private hospital states:

Whenever you are going to conduct a procedure relating the patient, the patient should have a good idea of what is happening around him/her and should give consent on whether it should be carried out or not. (B1-N)

The importance of understanding service user is highlighted by an AHP from the voluntary hospital:

The most important thing is the understanding of the patient. (C8-A)

Participants expressed that involvement of service users for their care planning and management is valued by service users. One doctor states:

When I speak to patients and explain the problems, issues, pros and cons of the treatment; they always feel great. They feel that they are valued. (A13-M)

One AHP from the voluntary hospital experienced that service users always feel great when they are fully informed of the issues, diagnosis and treatment. He comments:

It is our responsibility to give them (patients) full information of their diagnosis and treatment. I have seen how patients are thankful to us for giving them detail information. It is also a matter of satisfaction for us. (C5-A)

e) *Perceived benefits and challenges of IPW*

Participants believed that IPW is beneficial to them, service users and healthcare organisations; and

they believed that IPW helped to improve quality of care, improve staff satisfaction, better team performance, better communication and interaction.

Due to IPW, patients get an accurate service and HCPs get better exposure. The organisation gains goodwill. But, it has to be properly supported by leadership, supervision, guidance, training, education etc. (C1-N)

IPW is the most important factor while working in the hospital. You can do nothing at all just by yourself. Doctors, nurses and other supporting staffs make a team capable of working for the welfare of the patient. (B8-N)

IPW is very much important. Without teamwork, patients cannot receive authentic treatment. ... working in the interprofessional team can bring advantage to the institute. The reputation of the hospital can increase due to this. (C5-A)

All participants from all hospitals in this research pointed out obstacles, barriers and challenges of IPW. These barriers and challenges are related to personal, professional and organisational depending on the nature of IPW. HCPs professionals point out various barriers and challenges of IPW:

We do not understand each others' roles and responsibilities in terms of working together and it can be an obstacle. ... egoism is another obstacle for interprofessional team working and it should be stopped. (A11-M)

Lack of proper communication is also a barrier between the professionals in a team. (C3-M)

If there is no mutual respect between the professions, problems arise. Another barrier we can find is the communication barrier i.e. low level of communication. ... medical dominance also plays as a barrier for IPW. (B3-N)

Negative attitude, knowledge, education, lack of communication, lack of training, medical dominance can be mentioned as some of the barriers in the IPC team. (C5-A)

IV. DISCUSSION

This study concludes that medicine is the most established and dominant profession amongst all professions in the context of Nepalese healthcare due to their education, knowledge and expertise; and the respect and recognition they receive from the public and other professionals in Nepal. This may have been linked to the education and training system for HCPs in Nepal. There is tough competition to get entry into the medical courses compared to nursing and other healthcare professional courses. Medical graduates go through very extensive training during their university courses, in comparison to nursing and AHP. Medical dominance is widely discussed by various authors and research

scholars (Freidson, 1970 & 1986; Larson, 1977; Larkin; 1983; Kenny and Adamson, 1992). Nursing and AHPs lack specialist body of knowledge and have no monopoly in the healthcare field and dominated by medicine (Rawson, 1994; pp.47). Wall (2003) asserts that doctors have been dominant and the law accepted that 'what was done to patients was the doctor's responsibility even if they had not administered the particular treatment' (Wall, 2003, pp.73).

This research highlights the importance of organisational support for the development and implementation of IPW agenda in hospitals. Formal structures and processes are required in healthcare organisations to use the talents of different HCPs. This becomes important in Nepalese healthcare context as this research confirms that there were no organisational policies and guidance for IPW in any of the hospitals under study. HCPs in Nepalese hospitals believed that organisational policies give them a direction to deliver successful IPC and help them to improve the quality of care.

It is also important to highlight that healthcare organisations have to play active roles and need to allocate enough resources to support and encourage their employees to practice IPW, which ultimately helps to deliver effective health services and benefits service users, healthcare providers, HCPs and health system across the board. Literature also suggest that IPW is influenced by organisational factors, such as organisational culture, policies and regulations (Drinka and Clark, 2000, Payne, 2000 and Reel and Hutchings, 2007).

Most senior doctors in the interprofessional care team take the leadership roles and responsibilities for IPC in Nepalese hospitals. It is agreed as a common and accepted practice in Nepalese hospitals; and it is practised in a less formalised or less structured basis. The authority that medical professionals get through the licensing process gives them the power, privilege and exclusive rights. Most of clinical teams and professional groups in healthcare are led by senior clinicians (Fagin, 1992; Bope and Jost, 1994; Hammeman, 1995; McWilliam *et al*, 2003; Richardson and Storr, 2010), who are responsible for care given by the healthcare team.

This research suggests that many forms of communication and interaction; such as mainly co-operation, consultation, multiple entry and teamwork; occur during IPW in Nepalese hospitals. This study highlights that healthcare professionals also use informal means of communication; such as face-to-face discussion and phone consultation; in many situations in Nepalese hospitals. The CIHC (2010) states that communication in an IPC environment is demonstrated through listening and other non verbal and verbal means through negotiating, consulting, interacting, discussing or debating. This research confirms that team meetings in Nepalese hospitals were regularly held for various

reasons; such as clinical decision, information sharing and team management. Team meeting is considered as one of the main forms of IPW and a way of communication. However, the effectiveness of team meetings depends on how decisions of the team meetings were communicated to all members and stakeholders. Borril *et al* (2002) highlight the importance of group discussions and role play for IPW.

Involvement of service users in IPW and clinical decision making was another important finding of this study. IPC is delivered to service users and one of the objectives of IPW practice is to deliver effective and improved health services to service users. Empirical researches have demonstrated that more positive healthcare outcomes are achieved by engaging service users in clinical decision making (Colyer, 2012; CIHC; 2010; WHO, 2010; Pecukonis, *et al*, 2008). This study confirms that HCPs perceived consensual decision making was good for service users, even though all HCPs did not have equal involvement in clinical decision making. It is important that medical professionals are authorised legally for admitting patients, ordering tests and procedures, prescribing medications, making clinical decisions, carrying out interventions and procedures; which are restricted to nursing and AHPs. One of the attributes of IPW is consensual clinical decision making for the benefits of patients (Carnwell and Buchanan, 2005; Wells *et al*, 1998).

The findings of this study established that HCPs perceived interprofessional practices positively and they were aware of the importance of IPW for the effective delivery of health services even though they thought IPW was relatively a new concept in the Nepalese context. Literature (CIHC, 2010; Petri, 2010; Way *et al*, 2005) suggest that interprofessional practices influence the way healthcare organisations are run, managed and now the healthcare system are developed. This study highlights that many organisational factors such as training and education; organisational protocols and guidance for IPW; strong leadership; support from organisation, flexible rules, competent and confident workforce, clear job description and supervision are important for successful IPW in Nepalese hospitals.

IPW does not occur smoothly all the time without any obstacles. Several barriers to inter-professional practices perceived by HCPs within the structure of Nepalese hospitals, between and among HCPs. This study points out that funding and resource issues, organisational guidance and protocols for IPW and lack of education and training are the main challenges of IPW. Any move towards a greater integration and co-operation between agencies and practitioners may bring benefits, but also create tensions that need to be recognised and resolved for successful working relationships to be maintained (Fitzsimmons and White, 1997). IPW is recognised as the best practice in healthcare. However, the

implementation and operationalisation of the concept of interprofessional collaboration in health and social care has been a challenge (Petri, 2010).

V. CONCLUSION

This study assesses HCPs' perceptions of IPW in the delivery of health services in Nepalese hospitals. HCPs in Nepalese hospitals perceived that IPW is beneficial to HCPs, service users and healthcare delivery; and they thought it as a booster for effective delivery of health services and improving quality of care. This study confirms that the core concept of IPW is equally applicable in the context of Nepalese healthcare. This study confirms that dominance of medical professionals exists in Nepalese hospitals. HCPs perceived that IPW is not sufficiently motivated amongst HCPs and adequate support is lacking from all stakeholders in Nepalese hospitals. This study highlights the importance of organisations support and involvement of service users for the successful delivery of IPC. This study recognises factors that support IPW and identifies various organisational, professional and interpersonal barriers to IPW in Nepalese hospitals.

Declaration of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

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How Important are Primary Care Physicians and Specialists when Choosing a Medicare Plan

By Michael Castro, D.B.A.

Abstract- A primary care physician can be one of the most important components in the minds of Medicare beneficiaries. Primary care physicians are responsible for providing their patients with preventive care services as well as establishing care for individuals who are ill and require health care services. As a result, the primary care physician coordinates the patient's overall care, including referrals to specialists. The purpose of this paper was to obtain a concrete understating if primary care physicians and specialist play a key role for Medicare recipients when selecting a health care plan. The researcher evaluated the differences between the populations from Miami-Dade County and Broward County participants to determine if there were any similarities. The researcher utilized one research question in order to fulfill the objective of the paper. A total of 16 Medicare beneficiaries from two South Florida counties were interviewed.

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Abstract- A primary care physician can be one of the most important components in the minds of Medicare beneficiaries. Primary care physicians are responsible for providing their patients with preventive care services as well as establishing care for individuals who are ill and require health care services. As a result, the primary care physician coordinates the patient's overall care, including referrals to specialists. The purpose of this paper was to obtain a concrete understating if primary care physicians and specialist play a key role for Medicare recipients when selecting a health care plan. The researcher evaluated the differences between the populations from Miami-Dade County and Broward County participants to determine if there were any similarities. The researcher utilized one research question in order to fulfill the objective of the paper. A total of 16 Medicare beneficiaries from two South Florida counties were interviewed.

I. ROLE OF PHYSICIAN IN SELECTING A MEDICARE PLAN AMONG BROWARD COUNTY MEDICARE BENEFICIARIES

Six out of the eight beneficiaries from Broward County (2 females and 4 males) reported that either their primary care physician or specialist played an important role in their selection of a health care plan. Participant age varied but did not appear to play a significant role in this. Four of the six participants only valued their primary care physician. The other two valued both their primary care physician and specialists. As a result, the Broward participants highly valued their current primary care physician.

The male participants in Broward County valued their primary care physician or specialist more than did their female counterparts. The other two participants within Broward County did not value their current primary care physician.

II. ROLE OF PHYSICIAN IN SELECTING A MEDICARE PLAN AMONG MIAMI-DADE MEDICARE BENEFICIARIES

The eight participating Miami-Dade beneficiaries also value their primary care physician and specialists they visit on a regular basis. Of the eight, 6 participants (3 females and 3 males) responded that they highly valued their primary care physician and specialists. Two participants valued both their primary care physician and specialists. Four participants only valued their primary care physician. Their ages varied

and did not appear to have a significant impact on this decision. These findings suggested that the participants from Miami-Dade also value both their primary care physician and specialists; however, the males and females from the county equally valued these providers.

III. COMPARISON OF PHYSICIAN ROLE IN SELECTING A MEDICARE PLAN BETWEEN BROWARD COUNTY AND MIAMI-DADE COUNTY MEDICARE BENEFICIARIES

Both the Miami-Dade County and Broward County participants value their primary care physician and specialists that they visit on a regular basis. Six of the eight from Broward County valued either their primary care physician or specialists. In Miami-Dade County, six of the eight participants also valued their primary care physician or specialists. The only difference between the participants from both counties pertained to gender. In Broward County, more males valued either their primary care physician or specialist.

In contrast, the Miami-Dade participants equally valued either their primary care physician or specialist. This research question obtained similar results regarding the importance of the members' primary care physicians and specialists being contracted with their health care plan.

IV. SUMMARY OF THE ROLE OF PRIMARY CARE PHYSICIANS WHEN SELECTING A MEDICARE PLAN AMONG BROWARD COUNTY AND MIAMI-DADE COUNTY SAMPLES

The conclusion obtained from both populations resulted in the participants highly valuing their primary care physician and specialists. Six of the eight Broward County beneficiaries valued either their primary care physician or specialists. Six of the eight Miami-Dade County beneficiaries also valued their primary care physician or specialists. These 12 participants told the researcher that if their current primary care physician or specialist were not contracted to practice within a specific Medicare plan, they would not consider enrolling into that health care plan. The researcher concluded that the Miami-Dade and Broward County populations had identical responses.

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Effect of Gravitational Stress and Exercises on Bone Demineralization & Renal Complication in Paraplegics & Quadriplegics

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Abstract- Background: Spinal cord injury (SCI) is a multisystem injury with life-threatening complications. Bone demineralization & renal complications have serious consequences for the affected person. It is hypothesized that verticalisation along with early mobilization reduces skeletal & renal complications.

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Effect of Gravitational Stress and Exercises on Bone Demineralization & Renal Complication in Paraplegics & Quadriplegics

Gravitational Stress & Exercises for Spinal Cord Injury

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Results: Significant changes were noted in the values of urine calcium, inorganic phosphate, hydroxyproline & serum enzyme alkaline phosphatase among groups A, B & C when compare with D.

Conclusion: Tilt-table standing along with limb exercises were more effective in decreasing demineralization & renal complications. Also, active wheelchair bound life style can replace the need for verticalisation in chronic stages.

Keywords: spinal cord injury, gravitational stress, renal complication, bone demineralization, active/passive exercises, verticalisation.

1. INTRODUCTION

A spinal cord injury (SCI) is a multi-system damage with life-threatening complications. It can result in autonomic, neuromuscular and physiologic impairment of the legs, arms or trunk with the severity of the symptoms dependent upon the level and magnitude of the injury to the spinal column. A SCI to the cervical segments of the spinal column (C1-C8) down to the most proximal thoracic segment (T-1) often causes quadriplegia and results in impairment of the arms,

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trunk, legs, bladder, bowels and sexual organs. Any SCI occurring at the level of the 2nd thoracic vertebrae (T-2) or distally can result in paraplegia, with accompanying impairments of the trunk, legs and pelvic organs, with a decreasing severity of deficiencies the more distal incursion of the SCI¹. Persons with SCI have a reduced health status, decreased quality of life and increased rates of mortality compared to able-bodied population. The most common medical complications observed in SCI are muscular atrophy, bone metabolism disorders, cardiovascular disease & autonomic dysregulation due to removal of neural drive to the impaired muscles resulting in subsequent reduced metabolic demand accompanied by rapid & chronic deconditioning².

Osteoporosis: a well-known complication of SCI, is characterized by low bone mass & deterioration of the skeletal microarchitecture³. The mechanism of bone loss in SCI is not completely understood; however, a significant amount of bone loss occurs during the first 4–6 months after injury and stabilizes between months 12 and 16. Bone demineralization reaches almost 50% by the end of the first year following SCI. However, bone mineral loss continues to a lesser degree in the pelvis and lower extremities over the next 10 years^{4, 5}.

The pathophysiology of SCI-induced osteoporosis is complex and differs from that observed after prolonged bed rest in patients without SCI and in those with other neurologic deficits⁶. SCI can cause immediate and, in some regions, permanent gravitational unloading, leading to disuse structural change. It triggers significant increase in osteoclastic activity peaking at 10 weeks following SCI at values 10 times the upper limit of normal⁷. Hypercalciuria is 2–4 times that of persons without SCI who undergo bed rest and reaches a peak 1–6 months post injury; this marked increase in urinary calcium is the direct result of an imbalance between bone formation and resorption^{8, 9}. A reduction of bone mineral content during the first year after the injury of 4% per month in regions rich in cancellous bone, and 2% per month on sites containing mainly cortical bone is reported¹⁰.

SCI- mediated hormonal changes also lead to osteoporosis by⁵-

- Increased renal elimination
- Reduced intestinal calcium absorption resulting in negative calcium balance
- Vitamin D deficiency
- Inhibits osteoanabolic action of sex steroids
- Hyperleptinaemia
- Pituitary suppression of TSH
- Insulin resistance & IGF

Renal complications: Neurogenic bladder dysfunction due to SCI poses a significant threat to patient well-being. This can result from detrusor hypocompliance, detrusor-sphincter dyssynergia & neurogenic detrusor overactivity. Some of the complications observed are Incontinence, Renal impairment, Urinary tract infection, Stones etc^{11, 12}. In the absence of adequate treatment, calculi can lead to sepsis & renal failure. The major risk factors found are¹³.

- Hypercaliuria
- Increased susceptibility to Urinary tract infection.
- Immobilization
- Stasis of urine
- Altered urine pH

The chemical composition of SCI-related urinary stones is predominantly nonoxalate calcium (carbonate apatite) during the early years and consists of a higher proportion of magnesium (struvite) in the later years¹⁴.

It is hypothesized that verticalization, early mobilization & exercising of paralysed muscles may lower blood & urine concentration of catabolic products from collagen & bone and thus reduce the skeletal & renal complications¹⁵. Donaldson et al found that quiet standing for 2 hrs a day appears to reverse the changes in mineral metabolism induced by immobilization, whereas vigorous supine exercises for as long as 4 hrs daily is ineffective¹⁶.

Therefore, this study was undertaken to compare the effects of tilt-table standing & limb exercises against limb exercises alone in paraplegics & quadriplegics with a treatment regimen of 15 days. Also a comparison was made to assess the levels of urinary parameters between chronic patients & normal ambulatory control group.

II. METHODOLOGY

Post an institutional ethics committee approval, an informed consent was obtained from all the subjects prior to commencement of the study.

A total of 36 patients with a spinal cord injury, level of lesion ranging from C3-4 to T12 vertebrae were included in this study. Their age groups ranged between 18-55 yrs. The cause of lesion varied from trauma, myelopathy, transverse myelitis, and extra medullary tumor to Koch's spine. Participants were recruited from the outpatient & inpatient department of a tertiary care

public hospital & a renowned paraplegic foundation for the study conducted for a period of 15 days.

The inclusion criteria were as follows-

- Absence of cardiovascular, pulmonary or metabolic disorder
- Naturally free from spasticity or spasticity controlled pharmacologically
- Subjects willing to participate in the study

Exclusion criteria consisted of-

- Unstable or poor surgical fixation
- Presence of debilitating pressure sores

24 of these patients with acute injury were divided randomly by coin toss method into Groups A & B. 12 patients with chronic injury formed Group C & 12 normal subjects shaped the control Group D to assess the effect of this regimen in long-term management of these patients.

Basal parameters of PR, RR & BP were measured and recorded prior & post the study. 24hour urine sample & fasting blood sample was collected on day1, day7 & day15 for analyses in the biochemistry lab. The parameters analyzed were

- Urine calcium
- Urine inorganic phosphate
- Urine hydroxyproline
- Serum enzyme alkaline phosphatase

Exercise Protocol:

- Upper body active or active assisted exercises
- Passive lower limb movements with 10 repetitions for each joint
- Log rolling
- Deep breathing exercises with effective coughing techniques.

Tilt table standing:

- The patient was mounted on the tilt table with the help of 2 ward boys.
- Slings were tied across the patient's chest & knee to ensure maximum stability
- The table was then tilted with the degree of tilt maintained according to the patient's tolerance & pulse rate, volume to prevent postural hypotension
- Post tilt vitals were recorded
- Within 3-4 days the duration of tilt was increased to an 85-90 degree upright position for a period of 30 mins without much discomfort.

Procedure:

Group A: included 2 females & 10 males with 4 quadriplegics & 8 paraplegic patients. Their mean age was 35.08 yrs & mean injury duration was 4.25 weeks. This group followed the exercise protocol twice a day.

Group B: incorporated 5 females & 7 males, 6 quadriplegics & 6 paraplegics, mean age 29.49 & mean

injury duration of 7.98 weeks. They were subjected to tilt table standing along with limb exercises.

Group A & B both patients had an indwelling urine catheter.

Group C: consisted of 2 females & 10 males, 3 quadriplegics & 9 paraplegics with a mean age of 30.25 yrs & injury duration of 16.08 yrs. These patients were actively moving in wheel chairs, independent in ADL & some even participating in wheel chair sports. None of them were subjected to tilt table standing during their early paralysis phase.

This group was studied to see the long-term effect of physical rehabilitation & body's attempt at bone mineral homeostasis on urinary parameters.

Group D: comprised of normal ambulatory subjects with 5 females & 7 males and a mean age of 32.7 yrs. Their urine parameters were considered as normal values for comparison.

III. RESULTS

Comparison was made between the 3 study groups with the control group. All statistical analysis were done by using bivariate methods. Comparison of parameters between Groups A & B was done using unpaired student's t test & paired t test was used to analyze difference within a group.

Table 1 : Comparison of urine calcium between group A & B

URINE CALCIUM		
DAYS	GROUP A	GROUP B
1	12.38 + 5.23	13.75 + 6.19
7	10.53 + 3.12	10.45 + 2.48
15	10.60 + 3.48	8.38 + 1.56
t value	2.58	5.65
p value	< 0.05	< 0.001

Inference: A significant fall in the urine calcium levels were observed in both the groups with group B greater than group A from day 1 to 15

Table 2 : Comparison of urine phosphatase between group A & B

URINE INORGANIC PHOSPHATE		
DAYS	GROUP A	GROUP B
1	46.27 + 17.42	50.33 + 14.91
7	45.66 + 12.97	50.43 + 11.11
15	46.98 + 13.31	43.93 + 10.43
t value	1.36	4.51
p value	> 0.05	< 0.001

Inference: Levels of phosphate showed significant difference in group B while it was non-significant in group A.

Table 3 : Comparison of urine hydroxy proline between group A & B

URINE HYDROXY PROLINE		
DAYS	GROUP A	GROUP B
1	2.93 + 0.43	2.98 + 0.78
7	2.83 + 0.29	2.64 + 0.48
15	2.78 + 0.29	2.29 + 0.48
t value	2.45	4.54
p value	< 0.05	< 0.001

Inference: Levels of hydroxy proline showed significant difference in group B

Table 4 : Comparison of serum enzyme alkaline phosphatase between group A & B

SERUM ENZYME ALKALINE PHOSPHATASE		
DAYS	GROUP A	GROUP B
1	12.39 + 2.09	14.13 + 2.98
7	11.60 + 1.17	11.25 + 1.74
15	11.14 + 1.23	10.01 + 2.41
t value	2.91	7.1
p value	< 0.05	< 0.001

Inference: Serum enzyme alkaline phosphatase was significantly reduced in group B after 15 days of treatment

Table 5 : Comparison of urine parameters between group C & D

URINARY PARAMETERS		
PARAMETER	GROUP C	GROUP D
CALCIUM	6.79 + 1.39	6.91 + 0.95
PHOSPHATASE	65.65 + 6.61	64.02 + 5.84
HYDROXY PROLINE	2.55 + 0.48	2.19 + 0.49
SR. A. P	12.03 + 2.89	11.60 + 1.09

Inference: Urine parameters & serum enzyme alkaline phosphatase were near normal between groups C & D

IV. DISCUSSION

The recent progress in the management of SCI has prolonged the survival of patients. The incidence of secondary bone & joint disorders has also increased considerably¹⁷. Bearing in mind the evaluation and particularities of the osteoporosis occurring in SCI patients, one should pay special attention to the time of injury. Intervention must ideally be introduced early as a large portion of bone loss occurs within 6 months, stabilizing at 12 to 24 months after SCI at values 60% to 70% of normal in the femoral neck and 40% to 50% in the proximal tibia^{10, 18}.

The physiological changes in various systems occur as a result of¹⁹-

- Change from partially upright-partially horizontal body position to a completely horizontal one
- Reduction in energy expenditure due to relative confinement in bed
- Almost complete reduction of stress on muscles & bones

Muscular loading of bones has been thought to play a role in the maintenance of bone density. Exercise increases site-specific osteogenesis in able-bodied individuals²⁰. A study demonstrated that standing might reduce the loss of trabecular bone after SCI. In this prospective study of 19 acute SCI patients, the patients involved in early loading intervention exercise lost almost no bone mineral, whereas the immobilization patients lost 6.9 to 9.4% of trabecular bone²¹.

A study done by Schoutens et al. has shown that exercises without weight bearing cannot counteract the loss of bone mass provoked by bed rest. Also, Kaplan et al, observed reduction in hypercalcemia in quadriplegics after weight bearing & strengthening exercises. Our findings, depicted in tables 1, 2, 3 & 4 correlate well the above studies. Mild significant fall in urine calcium is observed in group A too due to the fact that muscle loading & contraction in the form of active & active assisted exercises, promote maturation of newly formed collagen & calcification of bone matrix^{8, 21}.

Hydroxy proline also, returned to baseline as found in our study, supported by conclusion by Bergmann et al & Chantraine A^{22, 23}.

The abnormality in bone mineral metabolism is directly proportional to the amount of bone tissue immobilized. Thus, SCI patients develop hypercalciuria & mild hypercalcemia. With time, the bones become severely osteoporotic, mobilization of calcium reduces & eventually normalizes¹⁵. This was confirmed by our study in table 5. Since the patients in group C had a mean duration of paralysis of 16 yrs, the urinary levels had come back to their normal limits. This could be because of the body's adaptive strategy to control bone mineral loss over a prolonged period. During this period changes in hormonal factors such as growth hormone or a decrease in IGF-1 may result in a reduced bone turn over²⁴. Also, the independent & active lifestyle that the patients were leading played a crucial role.

a) Limitations

- Male to female ratio could not be maintained equally
- The level of lesion varied amongst patients recruited
- Cause of the lesion was different in amid patients
- Duration of paralysis was also different between patients
- The study had to be restricted to 15 days because of early discharge of patients.

V. CONCLUSION

Thus in our study we conclude that-

- Tilt-table standing which includes a positive gravitational stress & weight bearing was definitely more effective than limb exercises alone in decreasing bone mineral loss & breakdown products of collagen metabolites. This could be crucial for preventing skeletal deconditioning & renal complications in SCI patients
- In chronic patients, an active wheelchair bound lifestyle replaced the need for verticalisation when compared to the normal control group.

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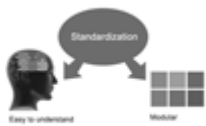
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- As a outline of job done, it is always written in past tense
- A conceptual should situate on its own, and not submit to any other part of the paper such as a form or table
- Center on shortening results - bound background information to a verdict or two, if completely necessary
- What you account in an conceptual must be regular with what you reported in the manuscript
- Exact spelling, clearness of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else

Introduction:

The **Introduction** should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable to comprehend and calculate the purpose of your study without having to submit to other works. The basis for the study should be offered. Give most important references but shun difficult to make a comprehensive appraisal of the topic. In the introduction, describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will have no attention in your result. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here. Following approach can create a valuable beginning:

- Explain the value (significance) of the study
- Shield the model - why did you employ this particular system or method? What is its compensation? You strength remark on its appropriateness from a abstract point of vision as well as point out sensible reasons for using it.
- Present a justification. Status your particular theory (es) or aim(s), and describe the logic that led you to choose them.
- Very for a short time explain the tentative propose and how it skilled the declared objectives.

Approach:

- Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done.
- Sort out your thoughts; manufacture one key point with every section. If you make the four points listed above, you will need a least of four paragraphs.



- Present surroundings information only as desirable in order hold up a situation. The reviewer does not desire to read the whole thing you know about a topic.
- Shape the theory/purpose specifically - do not take a broad view.
- As always, give awareness to spelling, simplicity and correctness of sentences and phrases.

Procedures (Methods and Materials):

This part is supposed to be the easiest to carve if you have good skills. A sound written Procedures segment allows a capable scientist to replacement your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt for the least amount of information that would permit another capable scientist to spare your outcome but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section. When a technique is used that has been well described in another object, mention the specific item describing a way but draw the basic principle while stating the situation. The purpose is to text all particular resources and broad procedures, so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step by step report of the whole thing you did, nor is a methods section a set of orders.

Materials:

- Explain materials individually only if the study is so complex that it saves liberty this way.
- Embrace particular materials, and any tools or provisions that are not frequently found in laboratories.
- Do not take in frequently found.
- If use of a definite type of tools.
- Materials may be reported in a part section or else they may be recognized along with your measures.

Methods:

- Report the method (not particulars of each process that engaged the same methodology)
- Describe the method entirely
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures
- Simplify - details how procedures were completed not how they were exclusively performed on a particular day.
- If well known procedures were used, account the procedure by name, possibly with reference, and that's all.

Approach:

- It is embarrassed or not possible to use vigorous voice when documenting methods with no using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result when script up the methods most authors use third person passive voice.
- Use standard style in this and in every other part of the paper - avoid familiar lists, and use full sentences.

What to keep away from

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings - save it for the argument.
- Leave out information that is immaterial to a third party.

Results:

The principle of a results segment is to present and demonstrate your conclusion. Create this part a entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Carry on to be to the point, by means of statistics and tables, if suitable, to present consequences most efficiently. You must obviously differentiate material that would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matter should not be submitted at all except requested by the instructor.



Content

- Sum up your conclusion in text and demonstrate them, if suitable, with figures and tables.
- In manuscript, explain each of your consequences, point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation an exacting study.
- Explain results of control experiments and comprise remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or in manuscript form.

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- Do not present the similar data more than once.
- Manuscript should complement any figures or tables, not duplicate the identical information.
- Never confuse figures with tables - there is a difference.

Approach

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- Put figures and tables, appropriately numbered, in order at the end of the report
- If you desire, you may place your figures and tables properly within the text of your results part.

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- You may propose future guidelines, such as how the experiment might be personalized to accomplish a new idea.
- Give details all of your remarks as much as possible, focus on mechanisms.
- Make a decision if the tentative design sufficiently addressed the theory, and whether or not it was correctly restricted.
- Try to present substitute explanations if sensible alternatives be present.
- One research will not counter an overall question, so maintain the large picture in mind, where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.

Approach:

- When you refer to information, differentiate data generated by your own studies from available information
- Submit to work done by specific persons (including you) in past tense.
- Submit to generally acknowledged facts and main beliefs in present tense.



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