Communication between primary health care and the emergency department during transfer of care of patients in Malta

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ABSTRACT

Background

Communication is important within the healthcare system. Communication failure can have negative effects on patients as it can result in adverse events.

Objective

To investigate the communication between the emergency department and primary health care in Malta using qualitative methods.

Method

The data for this study was collected via semi-structured interviews conducted in 2021-2022. The interviews were carried out online for convenience and safety measures due to COVID-19. The data collected was qualitative in nature. Twelve participants were involved in the study: four from the emergency department, four from private general practice and four from public general practice. The data collected was transcribed. The transcripts were confirmed with the participants, and analysed using the thematic analysis method to elicit common themes.

Results

The themes elicited were introduction to roles and similarities between them; frequency of communication; reasons for communication; the current methods of communication and opinions; recommendations; nurturing relationships and respect; and the physician's perception of the patient's experience.

Conclusion

Participants shared different ideas on how to improve communication and inter-personal relationships. The consensus was that, over the years, there has been an improvement in communication. However, there was still room for improvement. Several participants were in favour of improving direct contact, mainly by calling.

Keywords

Communication; general practice; emergency department; interaction; interprofessional relationship.

INTRODUCTION

Ineffective communication impacts patients negatively due to delays in treatment, medication errors, misdiagnosis, injury and even death (Foronda, MacWilliams and McArthur, 2016).

Interprofessional communication can occur via several means. These are divided into synchronous communication and asynchronous. Synchronous communication happens in real time such as meetings, phone calls, ward rounds and conversations. Asynchronous communication doesn't happen in real time. Examples include messages on white boards, notes and medication orders. (Foronda, MacWilliams and McArthur, 2016)

In the Maltese healthcare system, communication methods are not as effective as desired, especially between primary and secondary healthcare. Traditionally, the main methods are paper based: ticket of referral and discharge summary, both of which have been criticised as having a dubious standard. (Attard, Gauci and Mamo, 2017)

The main aims of this research are twofold:

1. To understand what doctors working in primary health care and the emergency department feel about the current communication system and
2. To explore and understand what their ideas of doctors working in the two areas are when it comes to improving communication between the two sites.

For this reason, this research will delve into the ideas, concerns and expectations as expressed by doctors working in the two sectors and analyse these to provide suggestions for improvements.

METHOD

This study's design was based on the literature review that was conducted prior to the study and the research questions:

- What are the thoughts of doctors in general practice (GP) and the emergency department regarding the current communication system between the two areas?
- What would be the method of choice for improvement?

The research was conducted by an interview. Several factors were kept in mind during its design:

- Time required to conduct the interview;
- Time required for data analysis and evaluation;
- Comfort of participants in sharing their views, thoughts, and feelings;
- Anonymity and data protection of participants.

Since there was no previous local study regarding communication between GP and the emergency department for comparison, the aim was to elicit basic data regarding the current system of communication between the two. Therefore, a phenomenological approach was adopted.

The target population included participants who had been working as doctors for at least two years and specialising in family or emergency medicine and private general practitioners (GPs):

- Emergency department physicians;
- Private GPs;
- Public GPs (health centres).

Triangulation was achieved by using more than one source to gather the viewpoints regarding communication between the emergency department, health centres and private GPs. This type of triangulation is called 'data triangulation' as different times and people were used to collect the data (Wilson, 2014). The other method used was 'investigator triangulation'. This is when more than one person is in involved in the data collection and analysis process (Wilson, 2014). In this case, an assistant was involved in data analysis. This helped to improve the strength of the study along with reaching saturation and its usefulness to the local healthcare system as, to the knowledge of the researcher, this was the first study with respect to communication between primary healthcare and the emergency department.

After gaining the proper permissions from the departments in question and ethical clearances from the Faculty Research and Ethics Committee, the Mater Dei Hospital Data Protection Office and the Primary HealthCare Department, an email was sent to the departments in question to be forwarded to their doctors. This technique provided a poor response. Therefore, other

methods of sampling were used which were convenience sampling and snowball sampling.

A pilot study was conducted to:

- Assess the wording and flow of the interview questions;
- Test out the feasibility of time allocated for each interview;
- Assess the feasibility of online meetings and comfort of participants.

All the assessed factors were found to be more or less as predicted.

It was deemed acceptable to include data collected from the pilot study into the final analysis since the study was a qualitative one. Since insights were gained from each interview and there were no major changes made to the interview questions or new unpredicted factors, the contamination of data analysis by including the pilot study was not regarded as a cause for concern (van Teijlingen and Hundley, 2002).

Thematic analysis was used for analysis. This can be used for identification, analysis, organisation, description and reporting of themes that can be found in the gathered data (Nowell et al., 2017). The steps taken were:

- Familiarisation with the data;
- Generating the first codes;
- The search for themes;
- Theme review;
- Naming and defining themes;
- Production of the report.

Limitations of this study include the lack of diversity of participants' experience and the lack of inclusion of physicians working in Gozo and the paediatrics emergency department.

RESULTS

The result of the analysis was condensed and formatted in one table (Table 1). This was done with the intention of providing a pictorial representation of the process that was undertaken from one step to the other.

Table 1, part 1: results of analysis

DATA EXTRACTS	CODES & SUB-CODES	SUB-THEMES	THEMES
Quotes from participants	GP in Public primary Health Care System • GP in both public and private	Introducing to the Participants	The Workplace of the Participants
	Group Practice		
	Private GP Physician		
	Emergency Department Doctor		
	Blurred lines between GP and the Emergency Department	The Workplace of the Participants	
	GPs know their patients better		
	Environment of the Emergency Department	The Workplace of the Participants	
	Environment of GP		
Quotes from participants	Frequency of communication with GP	Frequency for Communication	Frequency for Communication
	Frequency of Communication with the Emergeny Department		
Quotes from participants	Communication with the Emergency Department	Reasons for Communication	Reasons for Communication
	Communication with GP		
	Referring to the Emergency Department for tests not emergencies		
	Urgent vs Emergency		

Table 1, part 2: results of analysis (continued)

DATA EXTRACTS	CODES & SUB-CODES	SUB-THEMES	THEMES
Quotes from participants	Continuty of Care and Follow up	Communication when referring Patients to the Emergency Department	The Current Methods of Communication and Opinions; Recommendations
	Methods of Communication from GP to the Emergency Department • Phone • Ticket of Referral		
	Methods of Communication from the Emergency Department to GP • Phone	Communication when discharging the Patient back to the Community	
	Quality of Communication • Discharge Note • Ticket of Referral		
	Digitalisation of notes • Integration of systems	Recommendations for Improving Communication	
	Feedback after referral to the Emergency Department • Feels requests are ignored		
	Feels that Ticket of Referral is ignored • Feels requests are ignored • Patients feedback on Ticket of Referral		
	Importance of Ticket of Referral at the Emergency Department		
	Other possible Systems to use for Communication		
	Private GP Physician access to booking of tests and results		
	Reasons for more Direct Communication		
	Review of System • Work Practices		
	Fast Track for urgent cases but not emergencies		
	'Warm' Handover		
Quotes from participants	Respect between Professionals	Respect between Professionals	Nurturing Relationships and Respect
	Effect of Interpersonal Relationship	Improving Relationships	
	Improves Communication and Interpersonal Relationships		
	Hinders Communication and Interpersonal Relationships	Barriers to Relationships	
	Impression of the Emergency Department on referrals from GP		

Table 1, part 3: results of analysis (continued)

DATA EXTRACTS	CODES & SUB-CODES	SUB-THEMES	THEMES
Quotes from participants	Patient's impression and reaction about GP • Care at GP	Impression and Reaction as understood by the Physicians	The Physician's Perception of the Patient's Experience
	Patient's impression and reaction about the Emergency Department • Care at the Emergency Department • Medical Compaint		
	Patient's attitude affecting Transfer of Care • Discharge from the Emergency Department • Explanation to the Patient • Medical Complaint		
	Education regarding use od the Emergency Department	Health Care Use	

DISCUSSION

The participants are referred to as:

- Emergency Doctors: Pilot ED; ED 1; ED 2; ED3;
- Private GPs: Pilot Private GP; Private GP 1; Private GP2; Private GP3;
- Public GPs: Pilot Public GP; Public GP 1; Public GP 2; Public GP 3.

The workplace of the participants (Table 1, part 1)

GP in Malta can be split into two sectors: private (solo where the physician works on his/her own, in a small group practice or a large group practice) (Khoo, Lim and Vrijhoef, 2014) and public. There is only one official emergency department.

The emergency department is quite busy. This was acknowledged by most of the participants.

> *"All the staff there and all doctors and nurses work a lot and are literally working all the time. So you know, there is an admiration to all people working there." (Private GP 3)*

A hectic environment impacts and hinders interpersonal communication (Karam et al., 2017). According to Jafari Varjoshani et al. (2014), this is one of the main barriers preventing proper information exchange between professionals, and impacts patient care, resulting in patient suffering.

The threatening effect of poor communication on the patient's outcome is well known (Boddy *et al.*, 2021). The emergency department is estimated to have the highest number of medical errors, 53%-82%, compared to the inpatient department at 27%-51% (Jafari Varjoshani *et al.*, 2014).

The GP environment is calmer. However, this doesn't mean it does not get hectic. According to a study in Singapore, public GPs have a heavy patient load when compared to private practices as it was calculated that polyclinics see an average of 58 patients per day, while those in private see 30 patients (Khoo, Lim and Vrijhoef, 2014). However, it was also estimated that private GPs were responsible for 80% of primary healthcare (Khoo, Lim and Vrijhoef, 2014). This was acknowledged by one of the participants:

> *"I do know that health centres are very busy with a different kind of patient. Again, I mean, being very busy will result in things having to be fast tracked. So yes, that will negatively impact communication, I believe." (ED 3)*

This inclines one to think that recognition of a busy GP environment by the emergency department may help in improving interpersonal relationships and enhance cooperation and communication.

Frequency of communication (Table 1, part 1)

The frequency of communication depends on who is at the receiving end, the level of seniority and the method of communication in question.

Telephone communication frequency was not that high, which is consistent with the claim by Luu et al. (2016) who claimed that direct communication between healthcare providers is uncommon.

> *"Phone…maybe once every two weeks or a month? Doesn't happen that often." (ED 3)*

When it comes to paper-based communication, the experience of emergency doctors with tickets of referral was considerably higher.

> *"On a daily basis I see 3 cases, something like that." (ED 1)*

The frequency of communication initiated from GP depends on the method of communication. For telephone communication, the participants gave different responses. However, almost all of them had a rate that was quite low, ranging from a couple of times a month to a couple of times a year. This is dependent on the GP's experience and confidence, especially in complex cases.

> *"At least two-three times a week." (Pilot Public GP)*

Rates of referred patients to the emergency department is also dependent on the physician. This depends on the GP's experience, confidence and cases presenting in the clinic.

Reasons for communication (Table 1, part 1)

This was succinctly explained by Public GP2:

> *"Mostly when I am dealing with an emergency situation….Giving them over for a patient that I'm going to send over from the clinic over to them… to give them heads up about what's coming their way, especially if it's a very urgent situation….I call our colleagues at the emergency department if I am unsure about a clinical decision about a patient and i would like to their advice or their output on a particular situation" (Public GP 2)*

Pilot Public GP, Public GP 1 and Public GP 3 gave similar reasons. In addition, Pilot Public GP also stated that sometimes urgent cases are still referred as they couldn't wait for an outpatient appointment. This is well known as "considerations go beyond medical urgency" (Oslislo *et al.*, 2019). Private GPs gave similar reasons. Public GP 3 (who works both privately and publicly) commented that contact with the emergency department is initiated more often in private practice. Although there were no further comments about this, one possible reason could be that private practice has less support. The GP participants' comments were also confirmed by ED 1. One other mentioned reason was the need for investigations that cannot be booked or carried out at primary care.

Current methods and opinions; preferred systems, recommendations (Table 1, part 2)

The three main methods mentioned by participants were phone calls, tickets of referral and discharge notes, all of which confirm the findings of Knight's (2019) study.

A major drawback when using paper-based referrals includes missing details if the referrer is unaware of what is required by the emergency physician. A local study assessing quality of tickets of referral to the vascular clinic discovered that quality was poor and often had missing details (Chetcuti, Farrugia and Cassar, 2009). This was in agreement with another local study assessing the quality of referrals to the surgical outpatients (Cassar *et al.*, 2016). Unfortunately, this still seems to be an issue as Pilot ED commented that improvement regarding tickets of referral was needed.

An adequate ticket of referral can be viewed as a form of respect (Karam et al., 2017) and a key factor that negatively impacts communication and patient care (Nash, Hespe and Chalkley, 2016). This sentiment was echoed by Pilot ED who felt that an incorrectly filled ticket of referral was disrespectful.

Discharge notes are usually the sole communication between primary and secondary healthcare on discharge from secondary healthcare (Markiewicz et al., 2020) which involves transfer of responsibility back to the GP (Attard, Gauci and Mamo, 2017). The usefulness of discharge notes was echoed by several participants, confirming the current literature although there were also complaints regarding the quality.

> *"Unfortunately, sometimes, I think that they're a bit insufficient" (Public GP1)*

Calling is quicker when compared to paper–based communication and viewed as the most valuable by the participants. Locally, this method is used by GPs when an ambulance is needed, for handover and discussion of particular cases, and to seek advice when there is uncertainty regarding management. Apart from its ease, calling also allows discussion and passing on the required details. Suggestions from previous research show that urgent referrals should be accompanied by a phone call (Attard, Gauci and Mamo, 2017).

However, this has its disadvantages. If this were to be done for every patient, waiting time increases. To counteract this issue, Public GP 2 suggested assigning a doctor responsible for answering phone calls, like in telemedicine. There is no guarantee that the doctor, whom the GP spoke to on the phone, would see the patient themselves and this may result in wasted time. A GP participant mentioned a system of asking the patient to call them when they are being attended to by the emergency doctor. Although not always possible, this improves continuity of care and giving the necessary details to the doctor managing the patient. This has been proven to increase communication and collaboration between the two caring physicians (Karam *et al.*, 2017).

It was also noted by participants that, although paper-based communication from secondary healthcare seemed to be lacking when produced by someone inexperienced, the younger GP generation produced paper-based referrals of better quality, which could be explained by the ongoing training process of GP trainees.

As observed by participants, the consensus was that the quality of current communication, "could be better" (Public GP 3), that there is "lack of detail" (Pilot Public GP) and that, although there was an element of satisfaction, more could be done for improvement. One of the suggestions from participants was the use of electronic communication such as emails as it gives feedback directly to the referring doctor. However, email boxes can become overloaded and reading emails require time that may not be available (Attard, Gauci and Mamo, 2017).

Other suggestions included:

- A chat system combining the convenience of emails and real-time answer of a phone, without requiring users to stop what they are doing. (Considering that the internet would probably have to be used, one needs to think about matters of privacy and prevent hacking. This could threaten patient confidentiality and, unless a secure platform is provided, should not be attempted.)
- Integration of GPs during triage to determine the primary care cases.
- Increase access to investigations for GPs (particularly privately).
- Digitalisation and access to each other's medical notes.
- A feedback loop for communication between the referrer and discharging doctor.

Respect and nurturing relationships (Table 1, part 2)

Respect improves working environments and relationships (Mann, Lown and Touw, 2020). Most of the participants agreed with current literature that respect improves both (Mann, Lown and Touw, 2020). Most of the participants didn't have major issues regarding respect between the

departments; however there were complaints regarding the way the system works. Some also mentioned that the acquaintance of colleagues from the other department proved helpful when needing to communicate.

However, some participants from the GP side felt disrespected. Possible reasons for relationship barriers mentioned include:

- Unprofessional and unethical behaviour;
- Inflated self-image;
- The status quo;
- Impersonal communication and lack of human touch;
- Rigid hierarchies.

Some participant ideas for improvement were:

- Networking events to foster familiarity (especially informal ones) (World Health Organization, 2016).
- Joint continuing medical education (CME) events.

The physician's perception of the patient's experience (Table 1, part 3)

Although patients' attitude can set the baseline for the relationship between the emergency doctor and GP, none of the participants mentioned anything of a similar note. Therefore, it was assumed that no participant felt this was an issue.

According to Greenfield et al. (2016), there are also other motives behind patients' attitudes:

- Anxiety
- Convenience

  "Some people think that it was a waste of time going there [GP] and the following time they would rather go directly to the emergency department." (Public GP 3)

- Believing that hospital care is superior and seeking faster access to hospital care

  "Sometimes we do have this mentality that if someone has something serious or what the patient thinks it's something serious, they should never go to the general practice physician they should just go immediately to the emergency department" (ED 1)

- Dissatisfaction with GP - this was not felt to be a local issue

  "Most patients I would say, are quite accepting, very rarely we have patients who say: 'I've already been to the general practice physician multiple times they can't do anything; they didn't do anything to me'" (ED1)

- Being unregistered with a GP

  "There has to be more awareness about what primary health care services offer, what secondary health care services offer and what the emergency department...what is actually an emergency case. A particular group would be foreign patients, who wouldn't know how the system works." (Public GP 3)

- Absence of self-care skills

CONCLUSION

The participants felt that, although there has been improvement, there is still more that needs to be done.

Research on this topic is still needed, especially when it comes to methods for improving communication and the interprofessional relationship between the emergency department and primary care.

Participants' ideas on how this can be helped were: improving phone calls, especially by introducing a system like telemedicine where an emergency physician is responsible for the 'hotline' between the emergency department and GP; improving triage by inclusion of a GP to help differentiate between patients who need the emergency department from primary healthcare; registration of patients with their GP to improve continuity of care; improving the quality of tickets of referral; improving access and digitalisation of each other's notes (both private and public); and improving interpersonal relationship by conducting CME events, training and team building events together and providing feedback to each other.

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