

## Teamwork in healthcare organisations

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### Abstract

The concept of teamwork represents the basis of a new paradigm and a shift from the traditional inter-professional boundaries. A questionnaire was developed to analyse potential benefits and/or limitations of teamwork, and to determine the importance and existence of this notion with the Maltese public healthcare organisation. Of the 200 questionnaires distributed through email amongst employees within the Ministry of Health, 92 responses were received, giving a response rate of 46.5%. Whereas 40.2% stated that teamwork does exist locally, a slight majority remarked that teamwork doesn't exist. Approximately 98% affirmed that it would be beneficial for a healthcare organisation to embrace the concept of teamwork. The majority believe that barriers are a reality that inhibit effective teamwork and deem that intra-professional learning would aid health professionals to work and provide care together. The results indicate that teamwork is an important issue within the contemporary healthcare organisation.

**Keywords:** Healthcare organisation, inter-professional learning, teamwork, group think

### Introduction

In recent years the notion of teamwork has emerged and is nowadays changing the appearance of organisation structures and working practices. Teams and teamwork represent the basis of a new paradigm in healthcare. According to Daft (2003) a team is defined “as a unit of two or more people who interact and coordinate their work to accomplish a specific goal. The team concept implies a shared mission and collective responsibility”. To promote effective collaboration, the team must often address issues of group process, including: role clarification, team unity, communication, decision-making and leadership.

Learning to work together is fundamental to getting true teamwork started. Teams are important because they allow those working in them to use their diverse knowledge, skills and experience to contribute to collective decision-making and problem solving in order to achieve desired outcomes (Duthie, 1999). Working in teams would allow different professionals to better understand each other's role in healthcare and

what each profession could contribute. This would also facilitate team members in working across the boundaries of traditionally defined professional roles.

Increased healthcare costs are the result of developing technologies, the discovery of new drug therapies, an ageing population and better accessibility to healthcare services. However, resources are limited. It is necessary for healthcare organisations to embrace significant cost-effective measures. Cross-border working within member states of the European Union aims to reduce costs in the use of medical plants and equipment apart from enhancing patients' access to care, and rationalising the efforts of scarce professionals (Byrne, 2001). Despite the potential benefits of teamwork, not everyone wants to work in teams, as not all teams are effective. For instance, people might refuse to work in teams because they might find it as politically, economically or socially to their disadvantage. A well-known team problem is “group think”, in which outside influence and communication is cut off and members could avail

from appearing doubtful or by questioning each other's assumptions (Firth-Cozens, 1998).

The Ministry of Health is responsible for the financing and provision of healthcare for all of the population. The National Health System (NHS) is offered free of charge at the point of use to all Maltese nationals irrespective of their income and ability to pay. The NHS is financed by general taxes collected at a national level. A number of departments perform an integrating role across the National Health Service. There are nine departments in the Ministry of Health, which are each headed by a director. For instance, the director of Department of Primary Healthcare is responsible for primary care services and the management of health centres, while the director of the Department of Institutional Health is responsible for the management of state hospitals (Azzopardi Muscat, 1999a).

In any government, the health portfolio is by far one of the highest spending and is certainly the busiest. Health ministers are challenged on a daily basis to meet unlimited demands and expectations of health budgets with very limited and finite resources. Communities have high expectations of governments when it comes to healthcare delivery. Ensuring a sustainable healthcare system represents a big challenge, and the much-needed reforms for our NHS should be dominated by teamwork.

**Aim of the study**

A questionnaire was developed to analyse potential benefits and/or limitations of teamwork in the local healthcare organisation, and sought to evaluate the existence and importance of teamwork within the local setting. Issues related to inter-professional learning and level of agreement to teamwork-related statements were also investigated.

**Method**

A questionnaire was piloted and sent to 200 randomly-selected employees who have access to e-mail at work. The questionnaire consisted of a set of close-ended questions and an agreement scale question consisting of six-teamwork related statements. The respondents were asked to return a copy of the completed questionnaire electronically; 40 respondents preferred sending a hard copy of their answers. As a public institution of the Maltese Government, The Central Information Management Unit (CIMU) Compliance and Agent Management has certified the questionnaire for diffusion amongst the public service.

The questionnaire consisted of eight close-ended questions and six questions with an agreement scale

Table I. Questions used to investigate the teamwork concept.

Question
1) Please indicate your age group
2) Please indicate your gender
3) What is your current job/position in the organisation?
4) In which department are you currently working in?
5) Does teamwork exist in the local healthcare organisation?
6) Would it be beneficial for a healthcare organisation to embrace the concept of teamwork?
7) Are there any barriers that inhibit effective teamwork in our health organisation?
<i>Part two of the question provided a list of potential barriers and the respondents had to choose any option they felt that inhibits teamwork.</i>
8) Do you believe that health professionals should be given the opportunity to learn together in order to be prepared to work and provide care together?
9) Please indicate whether you Strongly Agree (SA), Agree, Neither Agree Nor Disagree (NA), Disagree (D), Strongly Disagree (SD), with the following statements
• Teamwork is a way of tackling potential inter-professional fragmentation
• Teamwork would improve the quality of healthcare and patient satisfaction
• Teamwork would increase sharing of knowledge and skills
• Teamwork would decrease costs in healthcare
• Teamwork would allow different professionals to understand each other's role in healthcare
• Teamwork would allow team members to feel valued and fulfilled

question as described in Table I. The first four questions aimed to investigate the demographic characteristics of the population under investigation by asking age, gender, current job or position, and the department to which the employee belonged. The remaining questions focused on teamwork issues, and included whether teamwork exists in the local healthcare organisation, whether teamwork would be beneficial for such organisation, barriers that could inhibit effective teamwork, opportunity for inter-professional learning, and teamwork-related statements based on an agreement scale. Responses to the completed questionnaires received were coded and entered in a database created by using Statistical Package for the Social Sciences (SPSS, Version 11) for statistical analysis.

**Results**

The results obtained from the questionnaires were compiled in a database and analysed in two parts. Part One focused on results achieved from questions investigating the demographic characteristics of the respondent population. On the other hand, questions analysed in Part Two sought to highlight the results of teamwork analysis. A total of 200 questionnaires were

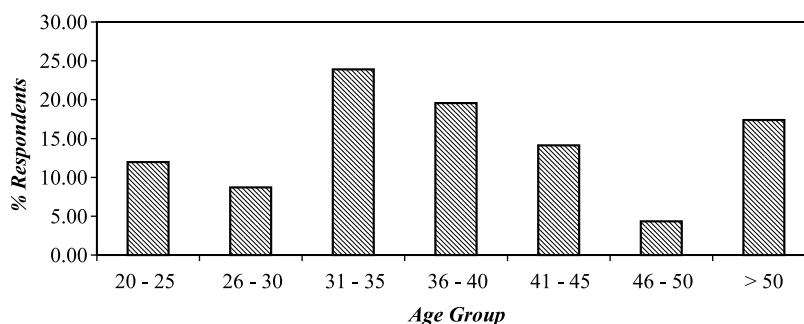


Figure 1. Age group indicated by the respondents at the time of the study.

distributed electronically via e-mail. Ninety-two responses were received, giving a response rate of 46.5%.

#### *Demographic characteristics*

Age ranges were provided in five-year increments, and stretched from 20 years to more than 50 years. The age range varied across all groups of ages provided. The most represented was between 31 and 35 years (23.9%), followed by 36 and 40 years (19.6%). Figure 1 shows the age group indicated by the respondents at the time of the study. The respondents' sample was made up of 27.2% males and 72.8% females. When looking at the cross-results between the age and gender question one can realise that across all age groups.

Cross-evaluation of the age groups results was achieved with a question about the existence of teamwork. It was observed that 57.9% who responded "yes" were aged between 20 and 30 years. Even though 42.5% of those aged between 31 and 40 years answered positively to this same question, a slight majority in this age group recognise no teamwork locally. In contrast, within the older age groups respondents believe that teamwork does not exist. For instance, 52.9 and 17.7% said that teamwork does not exist or didn't know if it exists, respectively. Figure 2 shows a graphical representation of cross-tabulation

results achieved for age group results and questions investigating existence of teamwork locally.

The respondents were asked to indicate their current job or position within the organisation. Not more than 30 different jobs/positions resulted; however, for the purpose of analysis nine sub-groups were drawn as indicated in Table II. The most represented profession (42.4%) was found to be nurses. The results achieved indicated that the majority of the respondents (65.2%) work within the Department of Institutional Health. A further 22.8% were employed within the Primary Healthcare Department.

#### *Teamwork analysis*

The respondents were asked to identify whether teamwork exists in the local healthcare organisation. Whereas, 40.2% stated that teamwork does exist locally, a slight majority (42.4%) pointed out that teamwork does not exist, whereas 17.4% of the respondents did not know if teamwork exists. The majority of respondents (97.8%) affirmed that it would be beneficial for a healthcare organisation to embrace the concept of teamwork.

Team working within healthcare settings is more complex and difficult to achieve than is commonly understood. Barriers, such as organisation of structure, contribute difficulties to effective teamwork

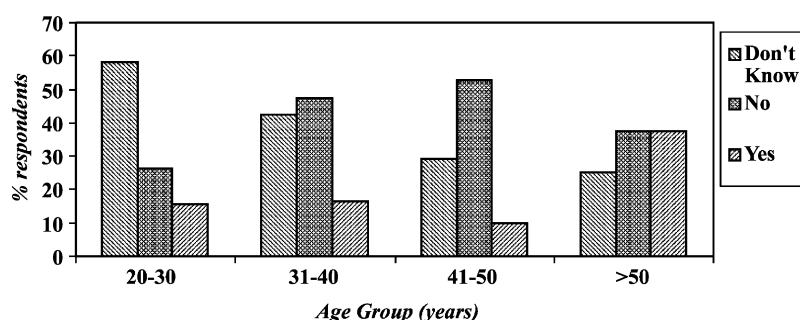


Figure 2. Cross tabulation of results achieved from questions investigating existence of teamwork locally and age groups.

Table II. Current job/position held within the organisation at the time of study.

Current job/position	%
Nurse	42.3
Nursing & deputy nursing officer	10.9
Pharmacist	8.7
Hospital pharmacist	8.7
Pharmacy technician	7.6
Non-healthcare professional	7.6
Administration	5.4
Medical doctor & physicians	4.4
Paramedical	4.4
Total	100.0

within a healthcare organisation, thus leading to individuals working more effectively alone than in a team setting (RPSGB and BMA, 2000). A large majority of respondents (94.6%) indicated that barriers do inhibit effective teamwork in our healthcare organisation. Only 2.2% said that no barriers exist, whereas 3.3% of the participants did not know if barriers exist.

The second part of this questionnaire presented the respondents with barriers that could inhibit effective teamwork. Most of the respondents (43.5%) said that all of the options presented are factors that inhibit teamwork in our organisation. Poor communication (28.3%) and organisational factors (19.6%) were the other most common reasons for possibly inhibiting effective teamwork in our organisation. Table III highlights the outcomes of the options that inhibit effective teamwork.

According to the World Health Organisation (WHO), inter-professional education is defined as “the process by which a group of students (or workers) from the health-related occupations learn together during certain periods of their education” (Mc Nair, Brown, Stone, & Sims, 2001). When asked whether health professionals should be given the opportunity to learn together in order to be prepared to work and provide care together, the majority (88.0%) of the

respondents indicated “yes” as their answer. However, a small number of the respondents (3.3%) indicated that inter-professional learning would not help healthcare professionals to be prepared to work together.

Keeping such issues in mind, the last question presented a set of statements and aimed towards reviewing the level of agreement by respondents with such statements. For instance, 66.3 and 23.9% strongly agree and agree, respectively that teamwork is a way to tackle potential inter-professional fragmentation. However, 8.7% neither agree nor disagree with such a statement. A small majority (53.3%) strongly agree that teamwork would decrease costs in healthcare. One respondent strongly disagreed with this statement. Table IV shows the outcomes of the results on the level of agreement to the statements on teamwork.

## Discussion

The health sector is one of the largest employers in Malta; government health sector employees are part of the civil service. Besides health professionals, various categories of support staff—ranging from auxiliary workers to clerical workers to engineers—make up the healthcare workforce (Azzopardi Muscat, 1999b). As previously reported, the majority of respondents were females. A larger female than male presence could eventually lead to some human resources problems, adding to those being issues already faced continuously, as mentioned previously. Some female employees are able to work on reduced hours or go on parental leave for up to three years, which is common amongst mothers with young children. Unfortunately, in most cases a replacement for such shortages is not always possible, if not to say impossible.

Cross-evaluation of gender with current job held within the organisations shows that at the administrative level, the majority (80.0%) resulted to be males. A male-dominant presence within the administrative levels across the public civil service sector in Malta is common. However, a chronic problem faced by government health employees is the high turnover of staff, with loss of personnel to the private health sector partly because of differences in working conditions between the two sectors (Azzopardi Muscat, 1999b). All the main State general hospital and other specialised state hospitals fall under the Department of Institutional Health. Thus, the results confirmed the expectation that most employees (65.2%) answering the questionnaire were working within the state general hospital, which has a high demand for human resources.

Of those who said that teamwork exists (40.2%), the majority (73.0%) worked within the Department of

Table III. Reasons which inhibit effective teamwork in our healthcare organisation.

Reasons for inhibiting effective teamwork	%
All options	43.5
Poor Communication	28.3
Organisational factors (e.g. Bureaucracy)	19.6
Professionals work in isolation	16.3
Diverse line of management	15.2
No continuity of care between hospital and community	14.1
Different demands for healthcare workers	9.8
Gender and Status effect	9.8
Other	4.4

Table IV. Level of agreement to statements on teamwork.

Statements on teamwork	% Results by row				
	SA	A	NA	D	SD
Teamwork is a way of tackling potential inter-professional fragmentation	66.3	23.9	8.7	1.1	0.0
Teamwork would improve the quality of healthcare and patient satisfaction	88.0	10.9	0.0	1.1	0.0
Teamwork would increase sharing of knowledge and skills	81.5	14.1	4.4	0.0	0.0
Teamwork would decrease costs in healthcare	53.3	18.5	18.5	8.7	1.0
Teamwork would allow different professionals to understand each other's role in healthcare	75.0	20.7	3.3	1.1	0.0
Teamwork would allow team members to feel valued and fulfilled	65.2	25.0	6.5	3.3	0.0

Key: strongly agree (SA), agree, neither agree nor disagree (NA), disagree (D), strongly disagree (SD).

Institutional Health. The outcomes of a conference organised locally in 2000 highlighted the lack of inter-disciplinary approach in our local healthcare system. One of the concluding remarks from workshops held stated, "health professionals need to learn how to interact with and respect other professionals and patients" (Agius, 2001). This could reflect the philosophy that teamwork might exist "within my group only".

Whereas 45.0% of those working within a hospital environment feel that teamwork does exist, the majority of those working in primary care (52.4%) do not agree with their hospital counterparts. The difference between hospital and primary care workers could be the result of the current situation of the health services in Malta, which is considered to be essentially hospital-based, with a weak supporting primary care structure. The divergence in the results mentioned here could also imply that hospital healthcare professionals could have a different perception of a team and their role in it.

Despite the potential benefits of working in teams, barriers to effective teamwork are also a reality. The data achieved in this study show that 94.6% indicated that barriers to effective teamwork in our healthcare organisation do exist. Cross-tabulation of this question with the questions investigating the age group and current job held showed that out of all groups and all job categories, the majority believe that there are barriers inhibiting effective teamwork. The results outlined in Table III show that 43.5% of the respondents believe that all options presented in the question, including different demands for healthcare workers, poor communication, organisational factors (such as bureaucracy), and different demands for healthcare workers are factors that inhibit effective teamwork.

The results seen from age group analysis could be an implication of generational changes, where the younger generation is more open to working together and across professional boundaries. Those within the older age groups could probably be accustomed to

a career of working in "isolation" and a lack of inter-professional approach to work. The difference seen in these results could also be a consequence of the divergent perception of teamwork between the young and old generation of workers. Nevertheless, in a modern health organisation future care workers will be required to function in a multi- and inter-disciplinary environment. Thus, understanding the intertwining roles of the different healthcare professionals and the role each professional plays in the healthcare team is essential, in addition to comprehension of the different perspectives, and professional and legal obligation of the various professions (EPSA-IPSF Joint Document, 1999).

Firth-Cozens (1998) reported that high stress was linked very closely to poor performance at work, and this was mainly due to poor teamwork or no teamwork at all. Indeed, one of the respondents stated that "lack of staff and high workload creates tension". Individual personality clashes, such as those between doctors and nurses, can cause splits within the team and may lead to giving inconsistent advice to patients and organisational difficulties. Steep hierarchies may cause difficulties within teams, certainly where there are large gaps between individual members in status or rewards. Pearson and Jones (1994) reported that in such a hierarchical context teamwork is arguably difficult, if not impossible, to achieve. Inadequate staff and resources, especially financial resources, may also constitute a barrier.

Advances in technology and telecommunication dramatically increased the ease of information transfer between members of the healthcare team. However, the lack of adequate infrastructure and self-interest amongst the healthcare professionals are factors leading to poor communication. One concrete example of this was the launch of the revised cardiovascular chapter of the National Drug Formulary in 2002 on the government intranet. Many pharmacists, doctors and hospital consultants were unaware of the changes within this chapter. The end result was initial confusion and different ways of

interpreting the revised criteria for dispensing and prescribing cardiovascular drugs; due to this, problems were encountered at various government dispensaries.

Establishment of an effective team requires time. Teams need to be developed through inter-professional education and continuing professional development. This study revealed that the majority of the participants believe that health professionals should be given the opportunity to learn together. Of those stating that teamwork exists locally, 89.2% believe that there should be an opportunity for inter-professional learning. Nevertheless, 5.4% think that such opportunity need not be given. Also, 94.9% of those indicating that teamwork does not exist think positively on inter-professional learning. This result could signify that learning in an inter-disciplinary environment might help to establish teamwork when the same professionals would interact daily in a work environment.

To facilitate inter-disciplinary practice, all healthcare professionals must be competent, recognize the meaning of a team, and share common values and a common vision. In this respect, a number of postgraduate programs, such as the Master's in Health Service Management offered at the University of Malta, are inter-disciplinary in nature and attract several healthcare professionals from different disciplines (Buttigieg, 2001). Nonetheless, literature published by Tufts Managed Care Institute highlighted that "multi-disciplinary training is difficult to implement because of professional boundaries, the traditional hierarchical structure of healthcare, clinical specialisation and education isolation" (Tufts, 2004).

The questionnaire presented a set of statements tackling issues in relation to the teamwork concept. Cross-evaluation of the results achieved between the statements and the question investigating if it would be beneficial for a healthcare organisation, one could realise that in all cases a strong majority strongly agree or agree with the statements. Effective inter-professional collaboration depends on establishing a deep understanding of the differences in values and beliefs (Buttigieg, 2001).

It is evident that literature supports the statement that teamwork would improve the quality of healthcare and patient satisfaction (Firth-Cozens, 1998, RPSGB and BMA, 2000, Wagner, 2000, Mc Nair *et al.*, 2001, Mifsud *et al.*, 2001). Of those who believe that teamwork is essential for a healthcare organisation, 83.3% strongly agree with such a statement. Even though the majority of the respondents believe that healthcare costs would decrease through teamwork, few believed that this would not aid in reducing healthcare costs. This could be inherent in the fact

that being "free of charge" in some cases leads to a tendency for irrational use of the NHS, especially free pharmaceuticals dispensed from government dispensaries.

Professionals working in isolation and different demands on healthcare workers are two recognised barriers that inhibit effective inter-professional teamwork. Results of the four statements concerning inter-professional aspects of teamwork show that including teamwork would allow different professionals to understand each other's role in healthcare and would allow team members to feel valued and fulfilled. This was cross evaluated with the results from those respondents who chose one of the afore-mentioned barriers. Of those who believe that different demands for healthcare workers constitutes a barrier, 60.0 and 100.0% strongly agree that teamwork could tackle inter-professional fragmentation and would allow one to understand the role of other healthcare professionals within healthcare, respectively.

Of those who believe that professionals are working in isolation, 91.7 and 58.3% strongly agree that teamwork would increase the sharing of knowledge and skills, and would allow team members to feel valued and fulfilled, respectively. Professionals working in such a team might reach a mutual decision on the course of therapy and each could contribute to reach the best possible decision for the patient. Also, active co-ordination across various disciplines could be a means for fulfilment and leads to appreciation of one's colleagues.

## Conclusion

The outcomes of the study supported the initial hypothesis that teamwork is beneficial for a healthcare organisation. According to a small majority, teamwork does not exist within the local healthcare organisation. However, it was also evident that a substantial number of healthcare workers working in a hospital environment could have a different perception of the concept, as they believe that teamwork exists.

Quality of care and teamwork go hand-in-hand. The study found that it would be beneficial for a healthcare organisation to adopt a teamwork approach. In the majority of cases, the results highlighted the idea that teamwork helps to improve the provision of a service of superior quality and would provide a better environment for inter-professional cooperation and collaboration. Cost containment in modern healthcare practice is of vital importance. While there was a belief amongst the respondents that teamwork could be a possibility, several barriers mentioned could ultimately hinder implementation of effective teamwork. Such barriers could have a more pronounced

effect in a highly bureaucratic organisation, such as that seen in the local setting.

In the contemporary environment, successful organisations aim to adopt a teamwork concept. To this end one could recommend analysis on how teams could be structured inside a highly bureaucratic organisation (i.e. the local healthcare organisation). Should teams follow a traditionally occurring hierarchy where doctors assume a leadership role over other members of the team? Teamwork also involves shared decision making. Thus, one should question how this would be supported in an environment where the physician is ultimately clinically responsible. What role do other healthcare professionals, such as pharmacists and nurses, have to play in this context of decision making?

In healthcare organisations, healthcare professionals are faced with an arduous task of providing a better quality service while reducing costs where possible. New therapies and technologies are being introduced, but most not affordable to everyone; thus healthcare entities have to maximise the output for the expenditure (Gafà, Bilbija, Martinova, & Bates, 2002). This brings about new roles and challenges to healthcare professionals, who require sharing of skills and knowledge, thus allowing different professions to better understand each other's role within an organisation. Ultimately, it is in the best interest of every healthcare provider to acknowledge and use the unique capabilities of all team members in order to provide the highest quality care for patients.

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