## Experiences of ambulance nurses in emergency care for patients with acute manic and/or psychotic symptoms

A qualitative generic study

Author Student number Group Supervisor Lecturer

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## Abstract

Experiences of ambulance nurses in emergency care for patients with acute manic and/or psychotic symptoms

**Background** Acute manic and/or psychotic symptoms could lead to a psychiatric crisis. Although ambulance nurses have an important contribution in caring for patients in crisis, little is known about their experiences regarding psychiatric emergency care.

**Objective** To explore the experiences of ambulance nurses in emergency care for patients with acute manic and/or psychotic symptoms.

**Methods** An explorative qualitative generic approach was used. Ambulance nurses were recruited from five regional ambulance services in the eastern part of the Netherlands. For data collection, unstructured, non-standardized interviews were conducted. Data were analysed using thematic analysis according to Braun and Clarke.

**Findings** Fourteen ambulance nurses were interviewed. Two main themes were merged. 'It is not my cup of tea but some like it' and 'You never know what you gonna get'. Participants who saw mental health as 'interesting', felt competent. In contrast, participants who saw mental health care as a 'different world', felt incompetent caused by a lack of education and/or having negative experiences with psychiatric patients. Psychiatric emergency care causes stress to ambulance nurses, created by a lack of information on the patients, being alone with the patient in a small place and the unpredictability of the situation.

**Conclusion** Ambulance nurses indicate that when their need for good collaboration with CRTs, police and psychiatric hospitals fulfilled, the quality of psychiatric emergency care could be improved.

**Recommendations** Stress reduction could be achieved when ambulance nurses are better informed about the patients by others. Thereby, it is important to make agreements about the collaboration and the performance of care with partners in the field.

### Keywords

Ambulance nurse, Emergency care, Mental health, Mania, Psychotic.

### Nederlandse samenvatting

Ervaringen van ambulanceverpleegkundigen met de acute hulpverlening aan patiënten met acuut manische en/of psychotische symptomen.

**Achtergrond** Acuut manische en/of psychotische symptomen kunnen leiden tot een psychiatrische crisis. Hoewel ambulanceverpleegkundigen een belangrijke bijdrage leveren aan de zorg voor patiënten in een psychiatrische crisistoestand, is er weinig bekend over hun ervaringen.

**Doelstelling** Het onderzoeken van de ervaringen van ambulanceverpleegkundigen met de acute hulpverlening aan patiënten met manische en/of psychotische symptomen.

**Methode** Er is gebruik gemaakt van een kwalitatief, generieke onderzoeksmethode. Ambulanceverpleegkundigen werden vanuit vijf ambulancediensten in het oosten van Nederland gerekruteerd. Data werd verzameld door het afnemen van ongestructureerde, nietgestandaardiseerde interviews. De data-analyse werd uitgevoerd met behulp van thematische analyse volgens Braun en Clarke.

**Resultaten** Veertien ambulanceverpleegkundigen werden geïnterviewd. Er werden twee hoofdthema's gevormd; 'Het is niet mijn ding maar sommigen vinden het leuk' en 'Je weet nooit wat je te wachten staat'. Participanten die psychiatrie als interessant betitelden, voelden zich competent. Daarentegen waren er participanten die psychiatrie zagen als een andere wereld. Zij voelden zich incompetent, veroorzaakt bij een gebrek aan scholing en/of het hebben van negatieve ervaringen met psychiatrisch patiënten. Acute psychiatrische hulpverlening kan leiden tot gevoelens van onveiligheid, veroorzaakt door een gebrek aan informatie over de patiënt, de onvoorspelbaarheid van de situatie en het alleen zijn met de patiënt in een kleine ruimte.

**Conclusie** Ambulanceverpleegkundigen veronderstellen dat wanneer zij voorzien worden in hun behoefte aan goede samenwerking met de crisisdienst, politie en psychiatrische ziekenhuizen, de kwaliteit van acute psychiatrische hulpverlening kan worden verbeterd.

**Aanbevelingen** Stressreductie kan bereikt worden wanneer ambulanceverpleegkundigen beter geïnformeerd worden over de patiënt door ketenpartners. Het is belangrijk om afspraken te maken met ketenpartners over de samenwerking en uitvoering van de zorg.

### Kernwoorden

Ambulanceverpleegkundige, Acute hulpverlening, Psychiatrie, Manie, Psychose.

### Introduction

Manic and/or psychotic symptoms could lead to a psychiatric crisis, defined as *"an acute disturbance of thought, mood, behaviour, or social relationship that requires immediate attention"*<sup>1</sup>. Psychosis is characterized by the presence of hallucinations without insight, delusions, or both<sup>2</sup>. Mania is a period of elevated, tense moods and increased activity or energy during a period of at least one week for most of the day<sup>2</sup>. A large part of patients that need psychiatric emergency care are patients with manic and/or psychotic symptoms<sup>3</sup>.

During a psychiatric crisis, different emergency services may be involved<sup>4</sup>. Crisis Resolution Teams (CRTs)<sup>5-7</sup> aim to offer ambulatory assistance for the support of patients in a psychiatric crisis. Police officers are involved in case of unsafe situations<sup>8</sup>. In case of forced hospitalization, ambulance services are responsible for the transport to a psychiatric hospital. Psychiatric emergency care takes place in a chain of care providers with different tasks and angles of approach. Therefore, a research line was created to serve patients with acute manic and/or psychotic symptoms that need emergency care. First, experiences of patients with acute manic and/or psychotic symptoms and their family-members with psychiatric emergency care were explored<sup>9</sup>. Patients frequently experience a lack of communication with involved professionals. Family-members felt powerless to handle the crisis<sup>9</sup>.

Ambulance services are one of the care providers who deliver psychiatric emergency care. Psychiatric emergency care performed by ambulance nurses mainly involves dealing with the consequences of the behavior such as managing physical trauma or an overdose<sup>10</sup>. Tasks of ambulance nurses involve de-escalating (communicative and physical), to indicate and apply sedation and fixation and to support family-members<sup>10</sup>. Dealing with cases of mental illness is a significant component of ambulance nurses' working life<sup>11,12</sup>. To our knowledge, few studies<sup>11–13</sup> have published about experiences of ambulance nurses with psychiatric emergency care. Ambulance nurses were frustrated by "filling the gaps for other healthcare services" in caring for patients with mental health problems<sup>13</sup>. Another study described the working relationship between ambulance nurses and CRTs as ineffective. CRTs extended their scene time and were often difficult to contact. Ambulance nurses emphasized a need for clear policy relating to the interaction between CRTs and ambulance nurses<sup>12</sup>. The results of previous studies cannot be generalized to Dutch psychiatric emergency care due to differences in legislation, healthcare processes and culture. In the current study, the experiences of Dutch ambulance nurses in emergency care for patients with acute manic and/or psychotic symptoms are explored. It is important to create a broader view of emergency care for patients with acute manic and/or psychotic symptoms, to find leads to improve the quality of care.

### Objective

The aim of this study is to explore the experiences of Dutch ambulance nurses in emergency care for patients with acute manic and/or psychotic symptoms.

## Method

### Study design

An explorative, qualitative, generic design was used. Because there is little knowledge about the experiences of ambulance nurses in psychiatric emergency care, this study had an explorative character. A generic approach seeks to describe participants' reports of their experiences<sup>14</sup>.

### Population and domain

The study population were ambulance nurses in the provinces Overijssel and Gelderland in the Netherlands. A convenience sampling strategy<sup>15</sup> was used to select ambulance nurses from all five regional ambulance services (RAVs) in this provinces. To ensure that participants have gained experience, ambulance nurses had to be involved with patients that experience acute manic and/or psychotic symptoms minimal five times in the last three years. The sample size of this study was determined by theoretical saturation<sup>15</sup>. The study occurred from January until July 2019.

### **Data collection**

Unstructured, non-standardized interviews were used to follow thoughts and interests of participants<sup>15</sup>. Each interview started with a general question to give participants the opportunity to tell about their own experience; "*What are your most memorable experiences in the care for patients with acute manic and/or psychotic symptoms?*" During the interviews, the direction and control of the researcher was minimal. An aide-memoire (appendix I), consisting of key-words, was only used when participants strayed from the overall aim of the study. The aide-memoire was derived from a previous study<sup>11</sup>. Thereby, the aide-memoire was discussed with a researcher who has experience as a nurse in CRT and as a Physician Assistant of RAV. A pilot interview was conducted with an ambulance nurse of one of the participating RAVs. This interview was transcribed verbatim. The audiotape and the transcript were discussed with the coordinating researcher to receive feedback about the interview and to evaluate the aide-memoire.

The face to face interviews were conducted by the principal researcher(JK). The researcher has no connections with participants. The research team consisted of JK, a clinical health science student who has work experience in mental health nursing; TD is a researcher who has experience as nurse in CRT and PG is coordinating researcher, professor and a nurse specialist in mental health care. To enhance confirmability, JK critically reflected on her own

preconceptions by writing these down prior to the start of the study. These reflections were regularly discussed with the coordinating researcher to stay aware of prejudices<sup>15</sup>.

All interviews were audio recorded and transcribed verbatim. Field notes were written by the researcher directly afterwards in the logbook. Notes were regularly discussed with the research team during meetings.

### Data analysis

Thematic analysis according to Braun and Clarke<sup>14,16</sup> was used. After the first three interviews, initial codes were generated by JK and PG individually. Initial codes were discussed to achieve consensus. The other interviews were coded by JK. All codes were discussed with the research team. Next, there was a search for subthemes by the clustering of codes that seemed to share unifying characteristics. Potential themes were reviewed by JK. This involved rereading all data to determine whether the themes meaningfully capture the data set. Thereafter, main themes were defined and named by the research team. Memos were made during analysis, containing thoughts and ideas about data and the clustering of codes<sup>15</sup>. The use of researcher triangulation and peer debriefing during the analysis enhanced the creditability and conformability<sup>15,17</sup>. NVivo, version 12, QRS international, Australia, was used to organize the data. Member checking was used to enhance the credibility<sup>15,17</sup>. Participants received a description of preliminary themes by email.

#### Procedures

The manager of each selected RAV received an explanation of the study by email. A flyer was posted on the intranet, or managers asked ambulance nurses for themselves. When ambulance nurses were interested to participate, they were asked to email the principal researcher. Then, potential participants received an information letter and got the opportunity to ask questions. In case of participation, consensus about the location, date and time was reached with the participant. Before each interview, informed consent forms (ICFs) were signed and demographic characteristics as gender, age and years of work-experience were collected.

### **Ethical issues**

This study was conducted according to principles of the Declaration of Helsinki<sup>18</sup>. The research proposal was assessed by the scientific committee of Dimence group. This study is a non-WMO applicable study<sup>19</sup>. All data was anonymized and had been stored on a secure data storage at Dimence. No one besides the research team had access to the data.

## Findings

Fourteen ambulance nurses participated in this study. Characteristics of participants are described in appendix II. Eleven interviews took place at the ambulance station, three interviews at the home address of participants. Theoretical saturation was reached after twelve interviews. Two extra interviews took place to confirm saturation. The interviews lasted 47 minutes on average.

### Themes

Two main themes emerged from the data. 'It is not my cup of tea but some like it', characterized the believes of participants on psychiatric patients, mental healthcare and their professional identity relating to the emergency care for patients with manic and/or psychotic symptoms. 'You never know what you gonna get' is characterized by the description of tasks and responsibilities of ambulance nurses, multidisciplinary collaboration and the experience of transporting patients with acute manic and/or psychotic symptoms. Some subthemes overlapped.

### Theme 1: It is not my cup of tea but some like it

### It is a different world

A minority of participants described their experiences with mental health as "interesting" and "fascinating". Most referred to it as elusive and a "different world".

"Psychiatry felt unsatisfactory, because you can't help the patient. You don't see that the patient is getting better". P5.

Most participants expressed uncertainty about an ambulance being the most suitable way of transport for patients with acute manic and/or psychotic symptoms.

## "The ambulance contains a number of medical equipment's, which were never used on psychiatric patients. It's a restless environment".P10.

Participants stated that they were insufficiently trained to guide psychiatric patients.

"We have too little knowledge. But we do the best we can".P9.

### I am the captain of my ship

Participants characterised their work as practical, quick fixes and solving problems. They saw themselves as a short link between CRT and clinical care. When on call, participants collect as much information about the patients as possible, describing it as having a de-escalating effect on the patient somehow. Participants expressed the need to follow their "gut feeling".

"CRT can say that it's safe to transport the patient, but that doesn't interest me. I will take it into account, but it isn't decisive for me. It's my transport, not theirs".P2.

Participants mentioned that a relaxed attitude, clear communication and taking time to act are important during their work with psychiatric patients. Most of the participants expressed trying to be themselves and communicating on the same level as the patient. Limiting stimuli were considered important during transport.

# "I dim the light, no music, no distracting things. It's important to stay calm, both verbally and physically".P12.

There were contrasting perspectives on how competent participants felt in psychiatric emergency care. When participants mentioned feeling competent, they mostly said this was caused by having work- or personal experience in mental health care.

## "As a child I lived on the terrain of a psychiatric hospital. Psychiatry is 'everyday habits' for me".P8.

When participants stated that they were feeling incompetent, they experienced a lack of education and feelings of fear for these patients.

"The car-accident is a trick, the approach is structured. Psychiatric disorders are harder to understand, you cannot learn it from paper".P7.

### It can be freaking scary

Some participants described feeling uncomfortable transporting a patient with acute manic and/or psychotic symptoms. They were sitting alone with the patient and were confined to a small space in the ambulance.

"You can't go anywhere, you can't evade, you can't leave, nobody can leave. That makes it risky, that's hard".P2.

## "You can't just take more distance from the patient. There is limited space in the ambulance".P1.

Participants mentioned that they have a feeling that partners in the field were not aware that ambulance nurses are alone with the patient in the ambulance.

*"When we arrived at the psychiatric hospital, four to six people were waiting. I was alone with the patient".P10.* 

### Theme 2: You never know what you gonna get

Ambulance nurses described two scenarios about how they were involved in care for patients with acute manic and/or psychotic symptoms. Scenario A; the ambulance was the first on scene. Ambulance nurses made executive decisions and proceeded to care. Scenario B, the CRT was already involved calling an ambulance specifically for the transport of the patient to a psychiatric hospital.

### Going in and do your thing

In case of scenario A, participants described trying to create an overall picture of the patient to indicate what care is needed.

"We collect information as much as possible. Did he use medication? Did he drink twenty bottles of beer? You try to get clear which route you should follow".P7.

In case of scenario B, nurses received the notification for transport from the control room. Participants vocalized experiencing an unpleasant- and unpredictable feeling when on route. This was partly determined by the limited information provided from the control room. When participants arrived at the location, they needed to be informed by CRT. Some participants mentioned that it is hard to get information.

"Information can make or break our actions. Psychiatrists don't realize that. It feels like being just a taxi. That's a bit like a degradation of our profession".P9.

### Is there anybody out there?

In case of scenario A, there is a difference in consulting general healthcare specialists versus mental healthcare specialists.

"We can consult neurologists, cardiologists, GPs, any specialists. Except psychiatrists".P3.

Participants noted that a couple of years ago, it was impossible to contact CRTs directly. Nowadays, it is possible, which is seen as an improvement. Due to the optimization of consultation, participants experienced more understanding about the way CRTs act. Some participants noticed difficulties in the collaboration. They stated sometimes feeling deserted by CRTs.

"CRT often said; 'the deal was he shouldn't drink. Now he drank, so we do nothing".P7.

When CRT is unwilling or unable to respond, and there is an acute need for care, patients were transported to the emergency department (ED). However, participants expressed that psychiatric patients don't belong on an ED.

"Psychiatric patients are sitting in a booth, start walking back and forth, ask for attention, but that kind of attention is hard to give on an ED".P13.

Another option participants noted is consulting the general practitioner (GP) to guarantee care. Thereby, they try to create support for the patient. Generally, participants have little contact with family members of psychiatric patients. Partially caused by the small social network psychiatric patients have. When family-members are involved, participants try to estimate what influence they have on the patient wellbeing. Participants also expressed feeling frustrated when CRT or a GP indicated that it was acceptable for ambulance nurses to leave the patient.

### "You are afraid of letting someone go who is possibly a danger to himself or for his environment".P6.

In case of scenario B, participants stated that the course of action was more clear, experiencing the collaboration as more effective. Although participants mentioned that even in this case, effort has to be made to get sufficient information.

## "The legal correspondence is faxed to the control room, we don't get that information. That's a shame".P8.

Participants mentioned that when they want to evaluate transport, they could go to a so called 'relief team', which is unusual to do. Meanwhile, conversing with colleagues during coffee breaks was more common and was experienced as helpful. Other than "coffee-break-consultation", multidisciplinary debriefings rarely happen, stated participants. Participants

thought it was important to optimize the collaboration with partners and the establishment regarding initiatives of improvement. However, a lack of money, staff shortage and differences within organizations make this a complex process.

### Mind your step

In both scenario's, the assessment of safety was mentioned as an important task before transporting a patient. Participants stated that the assessment consisted of collecting information by family members, police and/or CRT. Thereby, the behavior and the cooperativeness of the patient were seen as important indicators. When participants felt they could not guarantee safety of their own or that of the patient, CRT was asked to give a sedative before transport. However, participants noted that CRT is reluctant on this topic.

"I asked CRT, 'did he take his medication?' 'No, he didn't, he won't take it'. CRT respects the autonomy of the patient, while we think the transport has to be safe".P1.

Another option is to call for assistance from police or security guards and/or fixation during transport. When police is involved in scenario A, some participants experienced that the police had another approach, more strict and hard-handed which in some cases, evoked more aggression.

"The police is always really quick to be hard-handed, force a patient down on the floor, using handcuffs. I think, this can also be done in a different way".P11.

When police or security guards provide assistance in scenario B, they could drive behind the ambulance or sit in the ambulance. This depends on the wishes of ambulance nurses. Involvement of the police gave participants a feeling of safety.

### Transport exceptionnel

Some participants experienced that transport of patients with acute manic and/or psychotic symptoms could feel uncomfortable.

*"When someone is staring at you for 45 minutes, and says nothing, that doesn't feel good at all".P1.* 

The collaboration with ambulance drivers was seen as important, although the interpretation of this collaboration varied. Some participants mentioned they debated with drivers about a

plan of action, before transport. Others mentioned the importance of having a driver in the background, silent but alert.

### "A good driver is someone who is there, without being there".P14.

"I communicate with the driver through the mirror. One face expression says all".P1.

Participants vocalized about having different preferences in the way of transport; some participants mentioned always transporting patients on the stretcher. Other participants mentioned preferring psychiatric patients sitting in a chair, because they believe this way of transport is less threatening for these patients.

## Discussion

This study explored the experiences of ambulance nurses in emergency care for patients with manic and/or psychotic symptoms. The theme 'It's not my cup of tea but some like it' referred to the believes of nurses on psychiatric patients, mental healthcare and their professional identity relating to emergency care for patients with manic and/or psychotic symptoms. There were contrasting perspectives on how participants view psychiatric emergency care. Participants who saw mental health as 'interesting', felt competent. In contrast, participants who saw mental health care as a 'different world', felt incompetent caused by a lack of education and/or having negative experiences with psychiatric patients. Participants expressed that the number of transports of patients with acute manic and/or psychotic symptoms occurs rarely. So, feelings of unfamiliarity could be maintained. A recent Australian study about the experiences of ambulance nurses in care for men with mental health or substance abuse problems suggested that feelings of incompetence were caused by the focus of ambulance nurses' education on the somatically part<sup>11</sup>. Participants in our study mentioned that psychiatric emergency care could lead to feelings of stress, created by a lack of information about the patient, being alone with the patient in a small place and the unpredictability of the situation. Stress could be defined as "the relationship between the person and the environment, with characteristics of the individual on the one hand and the nature of the environmental event on the other hand"<sup>20</sup>. Lazarus and Folkman described two appraisals of stress<sup>20</sup>. Primary appraisal is a judgment that an encounter is irrelevant, benignpositive or stressful. Secondary appraisal consists of a judgment concerning what might or can be done. This includes an evaluation about whether a given coping option will accomplish what it is supposed to do<sup>20</sup>. Mainly the secondary appraisal applies to ambulance nurses. They evoke feelings of stress when circumstances are unclear, or the information about the patient is insufficient<sup>21</sup>.

The theme 'You never know what you gonna get' is characterized by the description of tasks and responsibilities of ambulance nurses, multidisciplinary collaboration and the experience of transporting patients with acute manic and/or psychotic symptoms. When the ambulance was the first encountered, ambulance nurses made executive decisions and proceeded to care. In that case, a lot is being asked from ambulance nurses. They have to signal psychiatric symptoms, while participants mentioned that they are not trained to do that. Psychiatric patients were often referred to an ED. An Australian study examined the effects of a specialized mental health team (SMHT) on the length of stay of psychiatric patients on an ED<sup>22</sup>. The presence of a SMHT increases pressure and minimizes the length of stay of psychiatric patients of a specialized mental on an ED. Participants in our study mentioned that it can be hard to arrange

appropriate psychiatric care when they are the first on scene. This finding is in line with experiences of ambulance nurses in Australia<sup>23</sup>. Another Australian study investigated the effects of a Mental Health Acute Assessment Team (MHAAT)<sup>23</sup>. This team consists of a specialized mental health nurse and a paramedic. The MHAAT assesses the need of care at home, offers follow-up care within three days or refers and transports the patient to a psychiatric hospital if needed. The study rated MHAAT as highly successful; 69% percent of the patients was able to refer to a destination other than EDs or did not need transport<sup>23</sup>. Although our study only focused on emergency care for patients with manic and/or psychotic symptoms, the findings are in line with studies who focused on the experiences of ambulance nurses with general mental health care<sup>11–13</sup>.

Our study has several strengths. Firstly, five RAVs in the east of the Netherlands were included to compile a varied range of experiences which enhances the transferability<sup>15</sup>. Secondly, more than half (n=8) of the participants reacted on the member check which enhances the credibility<sup>15,17</sup>. All recognized themselves in the description. Two participants had some additions, which were added to the results section. Thirdly, with the use of peer-debriefing, bias or inappropriate subjectivity was detected<sup>15</sup>.

Our study had some limitations. Firstly, most participants have many years of work experience as ambulance nurses (on average, 16 years). This makes the sample unrepresentative for ambulance nurses and may affect transferability. Secondly, ambulance nurses were mainly recruited by managers. Ambulance nurses with a great aversion for psychiatric patients might not be asked or be willing to participate in this study, which could lead to selection bias and is a limitation in generalizability. Thirdly, we only included ambulance nurses in the east of the Netherlands, which influenced the generalizability. Participants mentioned that psychiatric emergency care in the middle of the Netherlands is better organized. Over there, transport of patients is arranged by specialized mental health care nurses and this region has special staffed locations for assessment of psychiatric patients, which could give other experiences.

To create a complete view of experiences of Dutch ambulance nurses, it is recommended to examine experiences in all provinces in the Netherlands. Stress reduction could be achieved when ambulance nurses are better informed about the patients by others. Feelings of incompetence about mental health care can be addressed by organizing courses with actors. This way, ambulance nurses get the opportunity to practice and enhance their skills to guide psychiatric patients. Ambulance nurses experienced diverse problems in the alignment of care; for example the reticence of CRT to give a sedative before transport or the hard-handed

approach of the police. It is important to make agreements about the collaboration and the performance of care.

## Conclusion

Psychiatric emergency care causes stress amongst ambulance nurses, created by a lack of information about the patient, being alone with the patient in a small place and the unpredictability of the situation. Ambulance nurses do not feel part of the chain of care providers who deliver psychiatric emergency care. However, ambulance nurses do not feel part of it. Ambulance nurses indicate that when their need for good collaboration with CRTs, police and psychiatric hospitals fulfilled, the quality of psychiatric emergency care could be improved.

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## Appendix I Aide-memoire

Table 1. Aide-memoire

Starting question:			
What are your most memorable experiences in the care for patients with acute manic and/or psychotic symptoms?			
Contact with the patient			
Contact with the family			
The contact with CRT professionals			
Information transfer between ambulance nurses and CRT, on beforehand and during the contact.			
Collaboration with the police			
Experiences prior to transport			
Experiences during the transport			
Experiences during transmission to the psychiatric hospital			
Afterwards emergency care			

## **Appendix II Demographic characteristics**

Table 2. Demographic characteristics

Participant	Gender	Age (in years)	Work experience as ambulance nurse (in years)
1.	Female	41	8
2.	Male	58	22
3.	Male	58	22
4.	Female	54	18
5.	Female	41	8
6.	Male	51	16
7.	Male	58	18
8.	Male	61	26
9.	Male	38	7
10.	Female	58	18
11.	Male	47	15
12.	Male	40	5
13.	Female	53	10
14.	Male	53	27